Golden Valley Ranch

Master Traffic Study

Rhodes Homes, Arizona Kingman, Arizona

May, 2006



Golden Valley Ranch – Master Traffic Study

Respectfully submitted,

Stanley Consultants, Inc.

Prepared by

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MOHAVE COUNTY PUBLIC WORKS DEPARTMENT



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DATE:

March 13, 2006

TO:

Christine Ballard, Planning and Zoning Director

FROM:

Steven P. Latoski, P.E., Civil Engineer

RE:

Master Traffic Study for Golden Valley Ranch, a proposed new community in Golden Valley, Arizona

This memorandum presents comments pertaining to our review of the January 2006 Golden Valley Ranch — Master Traffic Study, based on a 5,800 +/- acre multi-use development located in the Golden Valley area of Mohave County. Comments reference the *Mohave County Standards for the Preparation and Evaluation of Traffic Impact Analyses*, adopted by the Mohave County Board of Supervisors as BOS Resolution 2006-181.

The trip generation, directional distribution, and trip assignment analyses contained in the Golden Valley Ranch – Master Traffic Study represent critical inputs to the identification of traffic safety and operations deficiencies and assessment of impact mitigation alternatives. The evaluation of all planned roadway infrastructure improvements (e.g., roundabout modeling) and traffic operations strategies will tie directly to the results of the overall travel forecast for the proposed multi-phase development. Hence, the comments presented herein target the analysis of site traffic, method of analyzing roadway capacity for the anticipated build out year of 2025, and approach toward assessing specific infrastructure improvements upon opening of each individual phase of the master planned community.

The following denote specific comments on the findings of the Golden Valley Ranch - Master Traffic Study:

Trip Generation

COMMENT NO. 1:

A cursory review of Institute of Transportation Engineers (ITE) trip generation data applicable to the proposed uses within the master planned community indicate other time periods within a typical week may yield a substantially greater volume of total site-generated traffic than that within the weekday morning and/or afternoon peak period of adjacent street traffic. In recognition of the relatively low volume of background traffic in the area within and adjacent to the site, the trip characteristics of the collective multi-use development will determine the period of recurring peak traffic volume in the area for consideration in evaluating roadway improvements.

Determine trip generation for the Golden Valley Ranch Community for the following four periods:

- 1. Weekday A.M. peak hour of adjacent street traffic
- Weekday midday peak hour (taken as the greater of weekday A.M. peak hour of generator or weekday P.M. peak hour of generator for each land use)
- Weekday P.M. peak hour of adjacent street traffic
- Saturday peak hour

Future analyses of roadway capacity and required infrastructure improvements must reference the

highest peak hour of combined site-generated and background traffic.

COMMENT NO. 2:

The trip generation estimates presented in Table 9 consider the quantity sum of all phases, and parcels within each phase, for each categorized land use. The study accurately recognized that of the value of the independent variable (e.g., dwelling units, acres, square feet) for any land use often far exceeded the maximum value of any single study independent variable as reported in ITE *Trip Generation* and based estimates on average trip generation rates only. However, this approach likely did not produce the most accurate estimate of site-generated trips for the overall development and may have significantly overestimated the total number of site-generated trips. Using the methodology presented in the ITE *Trip Generation Handbook*, estimate the amount of site-generated trips for the Golden Valley Ranch Community as follows:

- Determine overall trip generation for each of the identified seven phases of the master planned community. This intermediate step allows for future operational capacity analyses of recommended roadway improvements by phase.
- Examine individual land uses by parcel, as permitted given available information, in order to
 more accurately estimate trip generation within the bounds of data contained in ITE Trip
 Generation and given average rates and regression equations. This approach also aids in
 trip assignment and the application of distinct trip distribution analyses to relevant parcel land
 uses.
- Report the overall trip generation for the Golden Valley Ranch Community as the sum of the individual trip generation analyses performed at the parcel/phase-level.

COMMENT NO. 3;

Provide a reference or other justification for the ratios applied to estimate the number of square feet of commercial and office floor area.

COMMENT NO. 4:

Consult with administrators from the Kingman Unified School District on the number of students expected to attend the planned elementary, middle, and high schools, and update the associated land use quantities as per revised guidance.

Trip Distribution

COMMENT NO. 5:

It is recognized that certain land use relationships within a mixed-use development will in turn, result in a reduction in the total number of new or "primary" trips. The balance of the total trips generated by each individual land use, or "secondary" trips, will originate from another land use on-site. This phenomenon, where two stops within a trip are made within one mixed-use development, is referred to as the effects of the "captive market". A primary trip is generated exclusively by travel from/to a site with no other on-site stops, and a secondary trip is one in a series of stops. Two components of a secondary trip are "pass-by" trips and "diverted linked" trips representing stops made along a trip chain (e.g., work to bank to restaurant to home).

The Golden Valley Ranch – Master Traffic Study includes analyses aimed at estimating the number of new, site-generated trips attributed to each identified land use. However, the study provides no reference or other explanation of the determination of appropriate secondary trip percentages. Revaluate the percentage of on-site, secondary trips applied under each land use using data from the ITE *Trip Generation Handbook*, other nationally recognized sources, and/or specific, comparable developments.

COMMENT NO. 6:

Clarify whether the proposed golf course will be open to the general public. If the course is intended to serve the general public, then the percentage of on-site trips must total less than the

100 percent figure applied in the study.

COMMENT NO. 7:

The study presents a single directional distribution for the multi-use development, although residential land uses produce trips and commercial/office/recreational land uses attract trips and exhibit various market areas. Describe the directional distribution analysis methodology used in the study, and estimate a revised directional distribution(s) based on characteristics of the following land uses:

- Single family residential attracted to employment centers during weekday commuter periods and commercial centers during other peak travel periods.
- Senior adult residential attracted to commercial/recreational centers with employment centers a secondary consideration during weekday commuter periods.
- County park / school attract local residents
- Golf course attract local and regional residents
- Office / shopping center attract local and regional residents with market area representing a function of retail/office type and size

COMMENT NO. 8:

The study designates the Wal-Mart distribution center as a primary destination for residential trip productions. However, the distribution center will have only a few hundred employees that may reside in areas from Kingman to Bullhead City.

COMMENT NO. 9:

Discuss the potential of Verde Road servicing a percentage of site-generated traffic between Shinarump Drive and State Route 68.

Background Traffic

COMMENT NO. 10: Mohave County and Arizona Department of Transportation (ADOT) traffic impact analyses standards require mitigation of project traffic impacts for the opening year of each phase, 5 years after opening, and 15 years after opening (i.e., per Analysis Category IIc). An estimate of background traffic proportional to a reasonable assessment of development in the Golden Valley area is required for each of the cited horizon years. It may prove plausible to develop a growth factor(s), applicable to existing ADT data on county roadways traversing the study area, calibrated based on reliable traffic data (i.e., data from ADOT permanent count stations) at locations within or near the incorporated areas of Mohave County that have exhibited a significant and sustained level of growth in recent years.

Forecast Traffic Volumes

COMMENT NO. 11: Figure 12 does not delineate the volume of site-generated traffic for Year 2015 and Year 2025, the latter designated as the build out year for the proposed development.

Traffic Analysis

COMMENT NO. 12:

Provide a planning level analysis, based on Highway Capacity Manual methodology, of Mohave County arterial roadways serving the proposed development from Interstate 40 to the south and east and State Route 68 to the north. Determine the cross section necessary to service traffic at the anticipated build out year of 2025 under a desired LOS B and LOS C. Also, provide an arterial analysis for Year 2040, representing 15 years after opening per ADOT traffic impact analysis guidelines. A horizon year of 2045, as considered in the study, is an acceptable horizon year

alternative. Note that the recently released HCS+ software includes a new LOSPLAN module for arterial roadways that may be used for this analysis.

- COMMENT NO. 13: Describe the conceptual design of the proposed roundabout on Aztec Road, namely whether a single lane or two-lane roundabout is proposed in addition to the layout of approaches to the roundabout.
- COMMENT NO. 14: As per Mohave County Standards for the Preparation and Evaluation of Traffic Impact Analyses and ADOT guidelines, a traffic impact analysis is required for each phase of the proposed master planned community. Operational capacity analyses shall be performed for identified study intersections in order to determine the satisfactory intersection approach cross sections and intersection traffic control necessary to service traffic generated by the proposed development.

As a result of the comments provided herein on trip generation, trip distribution, traffic forecasting, and traffic analysis methodologies, we recommend a resubmission of the Golden Valley Ranch – Master Traffic Study prior our acceptance of study findings.

Mohave County Department of Public Works
Golden Valley Ranch Master Traffic Study
Response to Comments Summary Sheet

Number Number Determine trip generation for the Golden Valle community for four different periods Using methodology presented in the ITE Trip Handbook, estimate the amount of site-generate Golden Valley Ranch community Provide a reference or other justification for the applied to estimate the number of square feet commercial and office floor area Consult with administrators of Kingman Unifier District on the number of students expected to planned elementary, middle and high schools. Revaluate the percentage of on-site, secondal applied under each land use using data from the percentage of on-site trips must total 100 percent figure applied in the study Describe the directional distribution analysis muses The Wal-Mart distribution center will have only hundred employees that may resides in areas	mments Iden Valley Ranch	Stanley Consultants Responses	Response Location
	Iden Valley Ranch	<u>'</u>	
		Trip Generation was determined for the four time periods	Appendix A for Trip Generation sheet.
	ITE Trip Generation te-generated trips for	The site-generated trips were estimated a total of trips from each of the phases.	Chapter 4 - Trip Generation and Appendix A
		As suggested by the Architect the floor area ratio's were obtained from communities of similar size.	Chapter 2 - Project Description of the report
	ol I the	It was directed by the Kingman Unified School District that the number of students expected in elementary, middle and high school are 500, 800 and 1500 respectively	Chapter 4 - Trip Generation and Appendix A
		The percent of on-site or secondary trips were determined based on the directions provided by Mohave County Traffic Engineer	Chapter 4 - Trip Distribution of the report
	9	The on-site trips for the golf course have been updated to 75%	Chapter 4 - Trip Distribution of the report
	ology land	A different directional distribution has been provided based on the new Chapter 4 - Trip Distribution of the report offsite trips	Chapter 4 - Trip Distribution of the report
Kingman to Bullhead City		Wal-Mart distribution center has been updated as an Industrial Center and 20% of the total trips go to the Industrial Center	Chapter 4 - Trip Distribution of the report
Discuss the potential of \ 9 of site-generated traffic b Route 68	Discuss the potential of Verde Road servicing a percentage of site-generated traffic between Shinarump and State Route 68	Verde Road is currently not built and may not be used as an alternative route.	Chapter 4 - Trip Distribution of the report
An estimate of backgrour reasonable assessment of Valley Area for each of the TIA standards	5	Background traffic has been estimated based on growth rate calculated using the Historical data	Chapter 5 of the report
Figure 12 does not deline 11 traffic for year 2015 abd y the build out year for the	Figure 12 does not delinate the volume of site-generated traffic for year 2015 abd year 2025, tha latter designated as the build out year for the proposed devyelopment	The figure has been updated with the volumes from different study horizons	Figure 12 has been updated to Figure 13 of the report
Provide a planning level in the methodology, of Mohave the proposed developme	CM serving oute 68	A planning analysis has been performed using HCS+ software	Appendix B
13 Describe the concenptua	Describe the concenptual design of proposed roundabout	A preliminaryconceptual design of the roundabout has been discussed Chapter 7 - Roundabout Design, Figure 14	Chapter 7 - Roundabout Design, Figure 14
An Operational capacity a dentified study intersectit satisfactory intersection a controls necessary to ser proposed development	An Operational capacity analyses shall be performed for identified study intersections in order to determine the satisfactory intersection approach cross sections and traffic controls necessary to service traffic generated by the proposed development	Will be performed in the Phase Traffic Studies	Future - Phase Traffic Studies



EXECUTIVE SUMMARY

The proposed Golden Valley Ranch is a $5800 \pm$ acre multi land use development located in Golden Valley area of Mohave County, Arizona, Approximately 10 miles west of Kingman, Arizona. It is bounded by Shinarump Drive on the north, Aquarius Drive on the south, Tombstone Trail on the west, and Yuma Road on the east. The build out year for the proposed development is anticipated as 2025.

The development will be constructed in seven different phases. The land uses included in each of the phases are provided in Appendix A. Each phase of development will include roadways which provide access to the proposed land uses. Analysis on the roadways in each phase will be provided in separate traffic studies for each phase.

According to the Golden Valley Area Plan provided by the Mohave County Planning and Zoning Department, the right of way for the vast majority of Golden Valley Roadways was platted before 1965, prior to County's subdivision and roadway design review process. There are approximately 220 miles of County roadways within Golden Valley Area Plan's boundaries. Nearly three fourths of these roadways are unsurfaced. Only 7% of the roadways have regular asphaltic concrete.

To quantify and assess the traffic impact of the proposed development upon the existing and future roadway network and key intersections, trip generation rates for the proposed land uses were obtained using the ITE Trip Generation 7th Edition. It has been assumed that 30% of the total site trips generated will be captured internally. Of the remaining 70% trips, 30% of the trips are assumed to be to and from Kingman, 20% to and from Bullhead City/Laughlin and 20% of the trips attracted to and from the Industrial Center planned to the south of the property along Interstate-40.

The roadway standards of Mohave County were utilized and when items not specified were needed they were augmented with the City of Mesa standards. Stanley Consultants and Rhodes Homes, Arizona are coordinating with Mohave County Public Works in developing project specific roadway cross sections within the community. The typical Mohave County roadway cross sections are proposed to be used for the roadways outside the community

It is recommended that all of right of way for the roadways be defined based on future traffic signals at the intersections of major arterials. More detailed analysis of the various traffic control alternatives will be provided in the traffic studies for the different phases of the development.

GOLDEN VALLEY RANCH

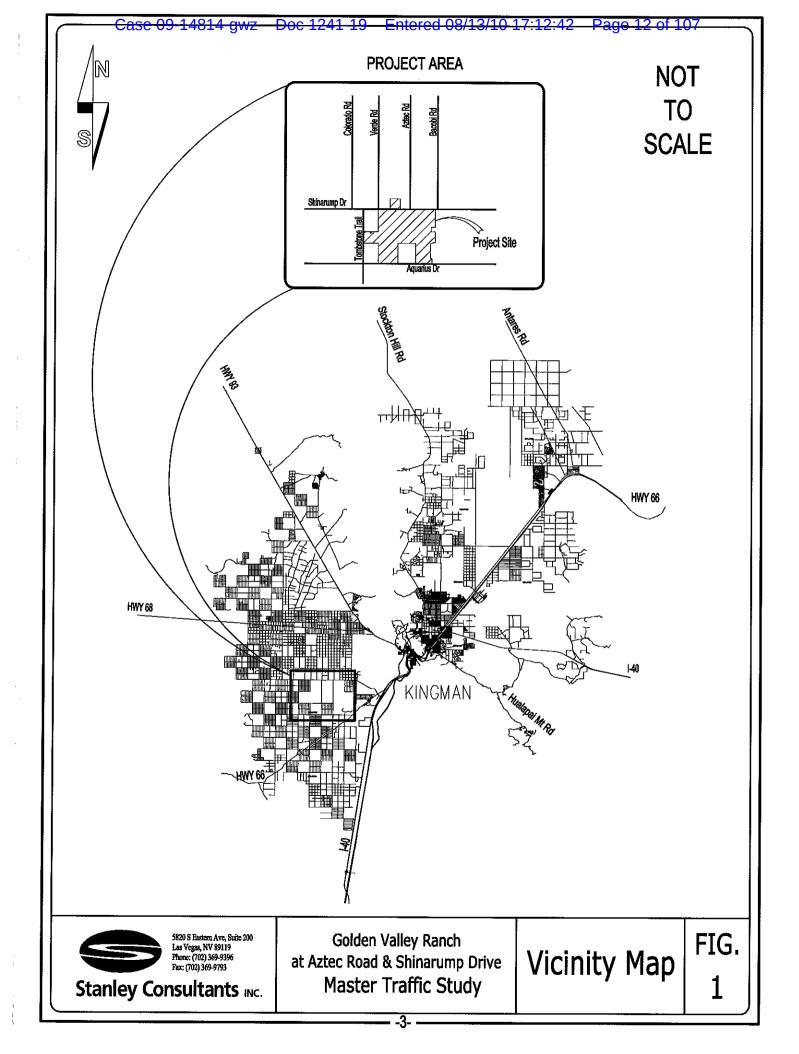
CHAPTER 1 – INTRODUCTION

PURPOSE OF REPORT

The purpose of this report is to present the assumptions, analyses and results of a Traffic Impact Study prepared for the proposed Golden Valley Ranch master planned community. Golden Valley Ranch is located on the south side of Shinarump Road in the Golden Valley South area in Mohave County, Arizona. This study determines the traffic generation characteristics of the proposed project, identifies potential traffic related impacts on the street network and proposes mitigation measures for the identified impacts. This traffic impact analysis is based on the information and project descriptions supplied by Rhodes Homes, Arizona and the requirements and requests of the Mohave County Public Works staff.

STUDY OBJECTIVES

The objectives of this Traffic Impact Study are to quantify the transportation impacts of the proposed Golden Valley Ranch master planned community and to determine what improvements are necessary to ensure safe and efficient access to and from the development. The proposed development's relationship to the surrounding area and roadway network is shown in the vicinity map in Figure 1.

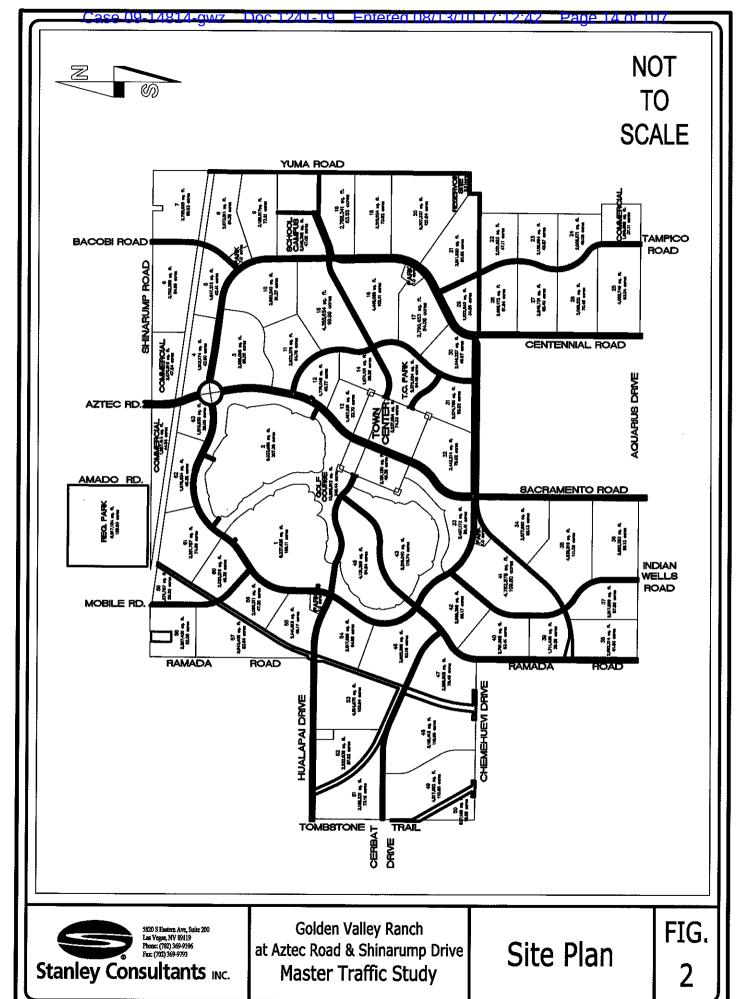


CHAPTER 2 – DESCRIPTION OF PROPOSED DEVELOPMENT

The proposed Golden Valley Ranch is a 5800± acre multi land use master plan development bounded by Shinarump Drive on the north, Tombstone trail on the west, Aquarius Drive on the south, and Yuma Road on the east. It will be comprised of an interconnected series of villages, each having a unique identity and character, served by nearby neighborhood shopping areas, parks and open space areas. Villages will be pedestrian and bicycle friendly with internal trail systems connecting the parks, open space, shopping areas and school facilities. Single family, multi-family houses, and apartments will be offered, as well as active adult neighborhoods, appealing to a variety of family types and incomes.

A town center comprising commercial, office space and residential land uses is planned in the middle of the community. A commercial area is planned in the northern edge of the community, allowing residents easy access to employment and shopping opportunities. A pedestrian oriented main street will serve as the center focal point of the master plan, along with the considerable scenic and recreational open space provided by the 18-hole golf course, also located in the center of the community. Figure 2 depicts the Site Plan of the master planned community.

The development consists of seven different phases and the land uses in each of the phases are listed below. For each phase of the development the necessary roadways will be planned and constructed to provide safe and efficient ingress and egress to the current phase and all the previous phases. Summary of land uses for the complete master planned community and for each individual phase are presented in Tables 1 to 8.



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Table 1 - Land Use Summary for the Master Planned Community

ITE Land Use Code	Description	Given Quantity	Units	Desired Quantity	Units
210	Single Family Dwelling Units	9,341	DU	9,341	DU
220	Apartment	1,539	DU	1,539	DU
232	High Rise Condominiums (TC)	10,000	DU	10,000	DU
251	Senior Adult Housing-Detached	13,675	DU	13,675	DU
412	County Park	74.1	Acres 74.1		Acres
430	Golf Course	249.5	Acres	249.5	Acres
520	Elementary School ²	16.1	Acres 500		Students
522	Middle School ²	16.1	Acres	800	Students
530	High School 2	16.1	16.1 Acres 1,500		Students
710	General Office Building 1,3	293.4	Acres	3,163.2	KSF
820	Shopping Center ^{1,3}	250.0	Acres	2,041.9	KSF

Notes:

 $^{1-\}mathrm{As}$ suggested by the project architect, a Floor Area Ratio of 0.25 is assumed for commercial developments and 0.33 for general office buildings. Also the net acreage is assumed 75% of the total acres.

^{2 -} Elementary and Middle Schools are planned as per standards provided by Kingman Unified School District.

^{3 -} KSF = 1,000 SF of Gross Floor Area.

Table 2 - Land Use Summary of Phase I of the Master Planned Community

ITE Land Use Code	Description	Given Quantity	Units	Desired Quantity	Units
210	Single Family Dwelling Units	2,278	DU	2,278	DU
220	Apartment	1,539	DU	1,539	DU
232	High Rise Condominiums (TC)	2,627	DU	2,627	DU
251	Senior Adult Housing-Detached	2,550	DU 2,550		DU
412	County Park	14.0	Acres	14.0	Acres
520	Elementary School	16.1	Acres	500	Students
522	Middle School	16.1	Acres	800	Students
530	High School	16.1	Acres	1,500	Students
430	Golf Course	249.5	Acres	249.5	Acres
820	Shopping Center	24.0	Acres	196.0	KSF

Table 3 – Land Use Summary of Phase II of the Master Planned Community

ITE Land Use Code	Description	Given Quantity	Units	Desired Quantity	Units
210	Single Family Dwelling Units	3,656	DU	3,656	DU
232	High Rise Condominiums (TC)	3,961	DU	3,961	DU
412	County Park	53.1	Acres	53.1	Acres
820	Shopping Center	36.2	Acres	295.7	Acres

Table 4 - Land Use Summary of Phase III of the Master Planned Community

ITE Land Use Code	Description	Given Quantity	Units	Desired Quantity	Units
251	Senior Adult Housing-Detached	3,554	DU	3,554	DU
232	High Rise Condominiums (TC)	1,365	DU	1,365	DU
412	County Park	7.0 Acres 7.0		7.0	Acres
820	Shopping Center	24.0	Acres	196.2	KSF

Table 5 - Land Use Summary of Phase IV of the Master Planned Community

ITE Land Use Code	Description	Given Quantity Units		Desired Quantity	Units	
210	Single Family Dwelling Units	2,814	DU	2,814	DU	
710	General Office Building	178.8	Acres	1,927.7	KSF	
820	Shopping Center	73.3	Acres	598.8	KSF	

Table 6 - Land Use Summary of Phase V of the Master Planned Community

ITE Land Use Code	Description	I Units I		Desired Quantity	Units
251	Senior Adult Housing-Detached	2,664	DU	2,664	DU

Table 7 - Land Use Summary of Phase VI of the Master Planned Community

ITE Land Use Code	Description	Given Quantity	Units	Desired Quantity	Units
251	Senior Adult Housing-Detached	2,962	DU	2,962	DU

Table 8 – Land Use Summary of Phase VII of the Master Planned Community

ITE Land Use Code	Description	Given Units Quantity		Desired Quantity	Units
210	Single Family Dwelling Units	593	DU	593	DU
251	Senior Adult Housing-Detached 3,081 DU		DU	3,081	DU
412	County Park	53.1	Acres	53.1	Acres
710	General Office Building	114.6	Acres	1,235.7	KSF
820	Shopping Center	36.2	Acres	295.7	KSF

CHAPTER 3 – EXISTING ROADWAY CONDITIONS

According to the Golden Valley Area Plan provided by the Mohave County Planning and Zoning Department, a vast majority of Golden Valley Roadways were platted before 1965, prior to County's subdivision and roadway design review process. There are some 220 miles of County roadways within Golden Valley Area Plan's boundaries. Nearly three fourths of these roadways are unsurfaced. Only 7% of the roadways have regular asphaltic concrete. The roadway master plan for Golden Valley region suggests that Aztec Road and Shinarump Drive are both section roadways and have a right of way of 100 feet.

Aztec Road is a north-south 100 feet right of way section line roadway with one lane in each direction. The posted speed limit is 45 mph. The roadway currently has various flood zones between Highway 68 and Shinarump Drive. Aztec road provides access to Highway 68 from the proposed development.



Figure 3 - Aztec Road between Highway 68 and Shinarump Drive

Shinarump Drive is an east-west 100 feet right of way section line roadway which is unimproved to the west of Aztec Road and one lane in each direction to the east of Aztec Road in the present day conditions. The posted speed limit on this roadway is 45 mph to the east of Aztec Road and 35 mph to the west of Aztec Road. This roadway provides access to Interstate 40 from the proposed development.

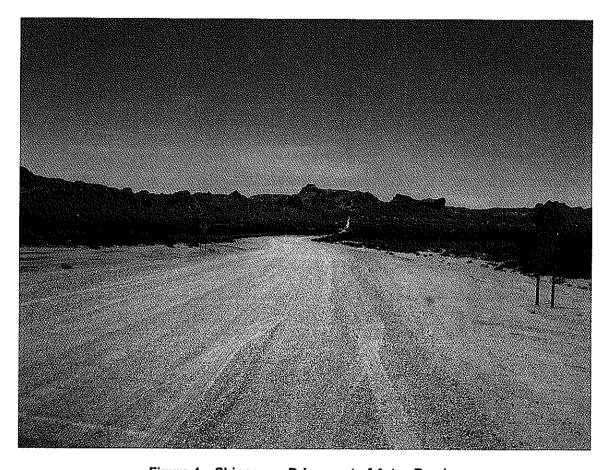


Figure 4 - Shinarump Drive west of Aztec Road

Aquarius Drive is an east-west 84 feet right of way section line roadway which is currently unsurfaced. The proposed Golden Valley Ranch provides five access points on to this roadway. This roadway connects the proposed development with Old Oatman Highway (Highway 66). The roadway is proposed to be developed in to a six lane facility by the end of build out of Golden Valley Ranch.

Highway 68 is currently a four lane undivided highway with a two way left turn lane in the project vicinity. The Golden Valley Area Plan proposes this road to be a four lane divided highway. The posted speed limit is 50 mph. The roadway is currently operating at a Level of

Service (LOS) A in Golden Valley. A recent Arizona Department of Transportation (ADOT) study concluded that Highway 68 is facing a proliferation of access points along its length.

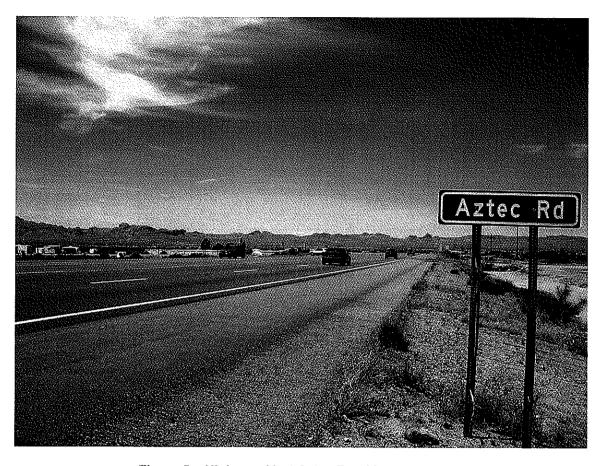


Figure 5 - Highway 68 at Aztec Road Intersection

Old Oatman Highway (Highway 66) is a two lane facility with a posted speed limit of 35 mph. This roadway provides access on to Shinarump Drive, which connects to I-40.

The existing roadway configuration is presented in Figure 6. The following intersections are expected to be taking major impact from the development of the Golden Valley Ranch community

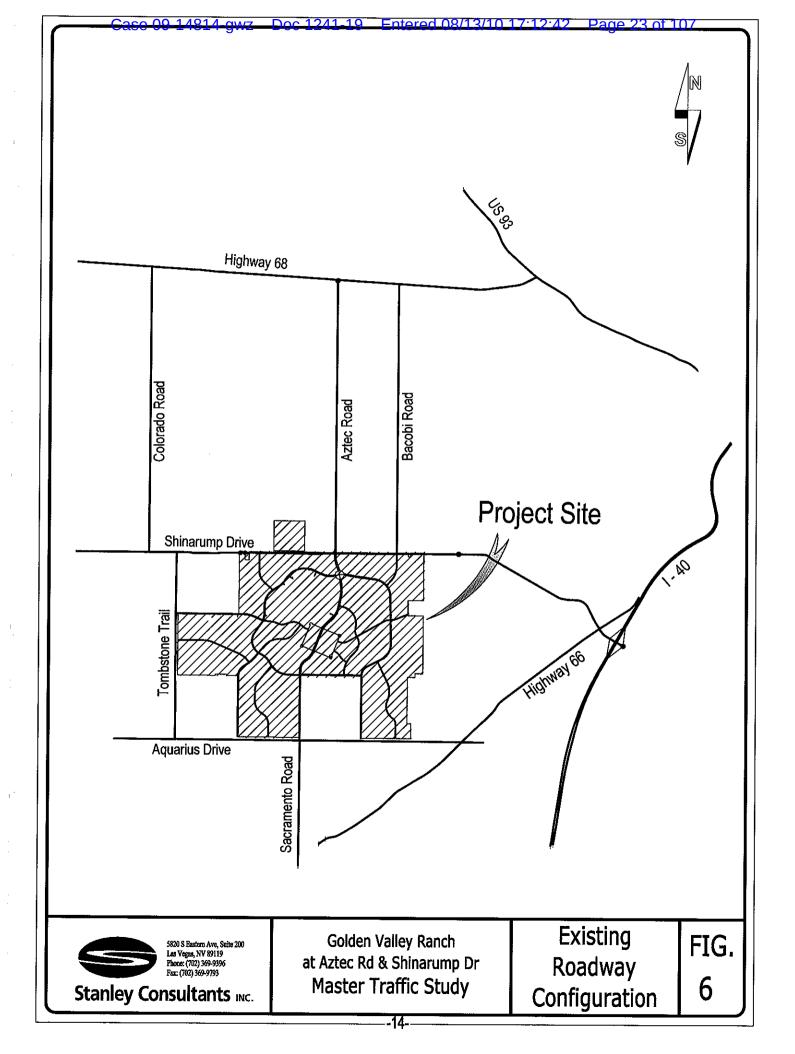
Aztec Road and Shinarump Drive is currently an unsignalized, three legged intersection with stop control on Aztec Road. The east and north approaches at the intersection are paved and have one lane each way. The west approach of the intersection is unimproved.

Shinarump Drive and Oatman Highway (Highway 66) is an unsignalized four legged intersection. The intersection is stop controlled with stop signs on the Oatman Highway. All the

east and west approaches of the intersection have a right turn lane and a through lane. Oatman highway is a north-south roadway with one lane in each direction at the intersection.

Aztec Road and Highway 68 is a stop controlled, four legged intersection with a stop sign on Aztec Road. Highway 68 has two through lanes in each direction and a center lane for left turn movements at the intersection. Aztec Road has one lane in each direction with a dedicated right turn lane at the intersection.

Shinarump Drive and I-40 Ramps are two intersections with stop control on both the off ramps. Shinarump Drive is a two lane roadway at both the intersections.



CHAPTER 4 – SITE TRAFFIC

TRIP GENERATION

To assess the traffic impact of the proposed development on the existing and future roadway network and key intersections, peak hour trip generation rates for the proposed land use were obtained from the ITE Trip Generation 7th Edition. In an attempt to determine the peak hour of traffic during the week, trips were generated for four different peak hours as suggested by the Mohave County Officials. The following are the time periods that were assessed to determine the peak hour:

- Weekday A.M. peak hour of adjacent street traffic
- Weekday P.M. peak hour of adjacent street traffic
- Weekday midday peak hour (taken as greater of weekday A.M. peak hour of generator or weekday P.M. peak hour of the generator)
- Saturday peak hour

The proposed development described in Chapter 2 is quite large and the value of various independent variables (e.g. dwelling units, acres, and square feet) for most of the land uses far exceed the maximum value of any independent variable as reported in the ITE Trip Generation 7th Edition. Hence, to estimate the total trips generated by the master planned community, trip generation for each parcel of each phase is performed for the above mentioned time periods and are added up to obtain the overall site trip generation. The trip generations for each peak period are provided in the Technical Appendix A.

In preparing an estimate of the number of square feet of commercial and office space, a floor area ratio of 0.33 and 0.25 was assumed for each net acre as recommended by the project architects. These floor area ratios are based on the project architects experience with similar master plan projects in suburban settings. These factors will be refined and updated as more specific and detailed planning occurs. Each net acre of land excludes roadways and accounts for approximately 75% of the total acreage.

Rhodes Homes, Arizona proposed school acreage includes an elementary school, a middle school and a high school. As suggested by the Kingman Unified School District, these schools are planned for 500 students in the elementary school, 800 students in the middle school and 1500 students for high school.

Trip generation for the proposed community suggests a weekday volume of 332,385 vehicular trips and a Saturday volume of 308,918 vehicular trips. Weekday P.M. peak hour volume is found to be 8.8% of the weekday volume. Midday peak hour volume is found to be 7.7% of the weekday volume. The summaries of the trip generations for each of the time periods are presented in the Appendix A.

TRIP DISTRIBUTION

Trip distribution is the process of estimating where the site traffic will come from and go to when site is completely build-out. Each vehicular trip has an origin and a destination. Due to the size of the planned development, many trips will have both the origin and the destination on the site or within the site. From the procedure outlined in the ITE Trip Generation Handbook, trip distribution is performed using the template shown in Figure 7.

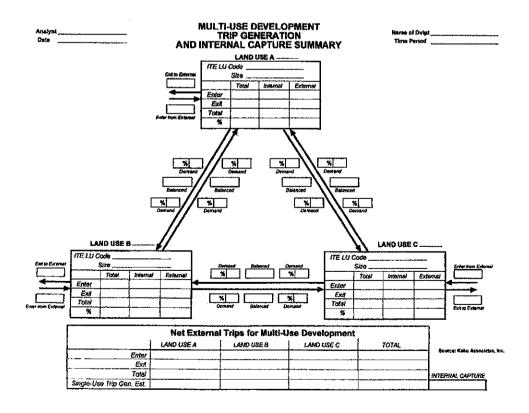


Figure 7 – ITE Trip Generation Handbook internal capture template

The ITE Trip Generation Handbook provides internal capture rates for Office, Retail and Residential land uses and suggests the use of local data for all other land uses. The calculation of internal capture based on the ITE data provided produces a 7% internal capture which is considered to be low for this master planned community. Therefore, the internal capture rate is recalculated using the following methodology.

It is suggested by the Mohave County officials that all trips generated by parks and schools to be considered secondary and stay within the community or on-site. The secondary or on-site trips generated by commercial property are calculated using the ITE Trip Generation Handbook. The secondary trip rate for office space is assumed to be 50% with the other 50% as primary trips. The primary or off-site trips for non-residential land uses during the four peak hours are presented in Tables 9 to 12. From the tables the primary or new trips are the trips that come out of the community onto the county roadway network, during the respective peak hour. Hence from Tables 9 to 12 it is observed that the P.M. peak hour and the Saturday peak hour produce the highest number of primary trips.

Table 9 - Trip Distribution for Non Residential Land Uses during A.M. Peak Hour

Phase ↓	Land Use →	Parks	Schools	Golf Course	Commercial	Office	Trips by Phase
	Total Trips	0	1,249	48	273	0	1,570
Phase I	Primary trips	0	0	12	191	_	203
	Secondary trips	0	1,249	36	82	-	1,367
	Total Trips	1	0	0	412	0	413
Phase II	Primary trips	0		-	305	-	305
	Secondary trips	1	_	-	107	-	108
	Total Trips	0	0	0	142	0	142
Phase III	Primary trips	-	-	-	92	-	92
	Secondary trips		-	-	50	-	50
	Total Trips	0	0	0	525	2,992	3,517
Phase IV	Primary trips	- 1	_	-	394	1,496	1,890
	Secondary trips	-		-	131	1,496	1,627
	Total Trips	0	0	0	0	0	0
Phase V	Primary trips	-	-	-	-	-	0
	Secondary trips	-	-	1	-	-	0
	Total Trips	0	0	0	0	0	0
Phase VI	Primary trips	-	-	_	-	_	0
	Secondary trips	- :	-	_	- "	-	0
	Total Trips	2	0	0	778	1,888	2,668
Phase VII	Primary trips	0	-	_	607	944	1,551
	Secondary trips	2		-	171	944	1,117
Total	Primary trips	0	0	12	1,589	2,440	4,041
Total	Secondary trips	3	1,249	36	541	2,440	4,269

Table 10 - Trip Distribution for Non Residential Land Uses during P.M. Peak Hour

Phase ‡	Land Use→	Parks	Schools	Golf Course	Commercial	Office	Trips by Phase
	Total Trips	1	470	64	995	0	1,530
Phase I	Primary trips	0	0	16	697	-	713
	Secondary trips	1	470	48	299	-	818
	Total Trips	1	0	0	1,501	0	1,502
Phase II	Primary trips	0		_	1,111	-	1,111
	Secondary trips	1		-	390	-	391
	Total Trips	0	0	0	517	0	517
Phase III	Primary trips	-	-	-	336	-	336
	Secondary trips	-	-	_	181	-	181
	Total Trips	0	0	0	1,088	2,876	3,964
Phase IV	Primary trips	-	-	-	816	1,438	2,254
	Secondary trips		-	-	272	1,438	1,710
	Total Trips	0	0	0	0	0	0
Phase V	Primary trips	-	-	-	-	_	0
	Secondary trips	-	-	_	-	-	0
	Total Trips	0	0	0	0	0	0
Phase VI	Primary trips	-	-	-	-	-	0
	Secondary trips	-	-	-	-	-	0
	Total Trips	9	0	0	2,832	1,815	4,656
Phase VII	Primary trips	0	-	-	2,209	908	3,116
	Secondary trips	9	-	-	623	908	1,540
Total	Primary trips	0	0	16	5,168	2,346	7,530
Hotal	Secondary trips	11	470	48	1,765	2,346	4,639

Table 11 - Trip Distribution for Non Residential Land Uses during Mid Day Peak Hour

Phase ↓	Land Use →	Parks	Schools	Golf Course	Commercial	Office	Trips by Phase
	Total Trips	8	1,249	97	273	0	1,627
Phase I	Primary trips	0	0	24	191	-	215
	Secondary trips	8	1,249	73	82	-	1,412
Ī	Total Trips	5	0	0	412	0	417
Phase II	Primary trips	0	-	_	305	-	305
	Secondary trips	5	-	-	107	_	112
	Total Trips	4	0	0	142	0	146
Phase III	Primary trips	0	_	-	92	-	92
	Secondary trips	4	-	-	50	-	54
	Total Trips	0	0	0	525	2,992	3,517
Phase IV	Primary trips	-	-	-	394	1,496	1,890
	Secondary trips		-	-	131	1,496	1,627
	Total Trips	0	0	0	0	0	0
Phase V	Primary trips	-	-	-	-	-	0
	Secondary trips		_	-	-	-	0
	Total Trips	0	0	0	0	0	0
Phase VI	Primary trips	-	-	-	-	-	0
	Secondary trips	_	-	-	-	-	0
	Total Trips	92	0	0	778	1,888	2,758
Phase VII	Primary trips	0	_	-	607	944	1,551
	Secondary trips	92	-	-	171	944	1,207
Total	Primary trips	0	0	24	1,589	2,440	4,053
1 Gta1	Secondary trips	109	1,249	73	541	2,440	4,412

Table 12 - Trip Distribution for Non Residential Land Uses during Saturday Peak Hour

Phase ↓	Land Use →	Parks	Schools	Golf Course	Commercial	Office	Trips by Phase
	Total Trips	31	165	160	1,319	0	1,675
Phase I	Primary trips	0	0	40	923	-	963
	Secondary trips	31	165	120	396	-	712
	Total Trips	16	0	0	1,989	0	2,005
Phase II	Primary trips	0	-	_	1,472	-	1,472
	Secondary trips	16	-	-	517	-	533
	Total Trips	16	0	0	686	0	702
Phase III	Primary trips	-		-	446	-	446
	Secondary trips	-	-	-	240	-	240
	Total Trips	0	0	0	1,340	791	2,131
Phase IV	Primary trips	~	-	_	1,005	396	1,401
	Secondary trips	-	-	_	335	396	731
	Total Trips	0	0	0	0	0	0
Phase V	Primary trips	-	-	_		-	0
	Secondary trips	-	-	-	_	-	0
	Total Trips	0	0	0	0	0	0
Phase VI	Primary trips	-	-	-	-	-	0
	Secondary trips	-	-	-	_	-	0
	Total Trips	351	0	0	3,754	499	4,604
Phase VII	Primary trips	0	-	-	2,928	250	3,178
	Secondary trips	351	-	-	826	250	1,426
Total	Primary trips	0	0	40	6,774	645	7,459
TULAI	Secondary trips	398	165	120	2,314	645	3,642

The internal capture rates for the P.M. peak hour and the Saturday peak hour are determined based on the primary and secondary trip distribution during the respective peak periods. Based on this assumption, Table 13 presents the internal capture rate calculations for the two peak hours.

Table 13 - Internal Capture rate Calculation

	Residential	Non Resid	ential Trips	Total Trips on	Total Peak	Intornal	
	Trips	Primary	Secondary	to the County Roadways	Hour Trips	Internal Capture	
PM Peak hour	17,185	7,530	4,639	20,076	29,355	32%	
Saturday Peak Hour	15,501	7,459	3,642	19,318	26,617	27%	

Based on the calculation in Table 13 an internal capture rate of 30% is assumed for both weekdays and weekend days, as the trips going offsite are higher during the P.M. peak hour. Of the 70% offsite trips, 30% are assumed to be attracted towards Kingman, 20% towards Bullhead City/Laughlin and the remaining 20% of trips towards the Industrial Center planned to the south of the community along I-40. The number of offsite trips towards Kingman, Bullhead City/Laughlin and the Industrial Center are assumed to be 70% of the total trips in 2015 when Golden Valley Ranch is only half developed and there is little development around Golden Valley

Ranch. In the build-out year of 2025, there is assumed to be more development around Golden Valley Ranch and hence only 35% of the total trips produced in Golden Valley Ranch are projected to be traveling to Kingman, Bullhead City/Laughlin and the Industrial Center.

The onsite and offsite trips for each phase during the P.M. and Saturday peak hours are presented in Tables 14 and 15.

Table 14 - Onsite and Offsite Trips during P.M. Peak Hour

Phase Peak Hour	,,	Residential	Non Resid	lential Trips	Total Offsita	Total Onsite	Total Peak
	Trips	Primary (Offsite)	Secondary (Onsite)	Traffic	Traffic	Hour Traffic	
1	PM Peak Hour	4,877	713	818	4,772	818	5,590
2	PM Peak Hour	4,544	1,111	391	5,263	391	5,655
3	PM Peak Hour	2,274	336	181	2,429	181	2,610
4	PM Peak Hour	3,184	2,254	1,710	3,728	1,710	5,438
5	PM Peak Hour	677	0	0	677	0	677
6	PM Peak Hour	797	0	0	797	0	797
7	PM Peak Hour	833	3,116	1,540	2,410	1,540	3,949
	Total Volumes:					4,639	24,716

Table 15 - Onsite and Offsite Trips during Saturday Peak Hour

		Residential	Non Resid	ential Trips	Total Offeito	Total Onsite	Total Peak
Phase Peak Hour	Trips	Primary (Offsite)	Secondary (Onsite)	Traffic	Traffic	Hour Traffic	
. 1	SAT Peak Hour	4,387	963	712	4,639	712	5,350
2	SAT Peak Hour	4,227	1,472	533	5,166	533	5,699
3	SAT Peak Hour	1,998	446	240	2,204	240	2,444
4	SAT Peak Hour	2,962	1,401	731	3,632	731	4,363
5	SAT Peak Hour	558	0	0	558	0	558
6	SAT Peak Hour	660	0	0	660	0	660
7	SAT Peak Hour	709	3,178	1,426	2,460	1,426	3,887
	Total Volumes:					3,642	22,960

Aztec Road and Bacobi Road were considered for the distribution of trips outside the community towards Highway 68 since they are in line with the access roadways in to the Golden Valley Ranch community. Colorado road is the other north-south roadway considered, since it is improved in the present day conditions and also in close proximity of Tombstone Trail. Verde Road is not considered as an alternative, because the roadway is not currently improved. Figure 8 depicts the offsite distribution of the site traffic. Of the 30% trips that are towards Kingman, it is assumed that about 15% would be using Highway 68 and the rest would be using Shinarump and Aquarius Drive due to the close proximity of these roadways to Highway 66 and Interstate 40.

Aquarius Drive is assumed to be carrying 10% of the traffic, as a result of the type of development along its access points. It would also serve to alleviate some traffic congestion off of Aztec Road. Figure 9 presents the offsite ADT volumes of site traffic on major county roadways in 2015 and 2025.

Figure 10 depicts the sections of roadways built in each phase of the Golden Valley Ranch community. Based on Tables 14 and 15, more offsite trips are observed during the P.M. peak hour. Therefore, the volumes during the P.M. peak hours are used for the planning analysis. Also the onsite and offsite trips per phase are distributed on the internal roadways to obtain the peak hour volumes. The ADT volumes are obtained using the assumption that the P.M. peak hour volumes are approximately 9% of the ADT volumes. The internal distribution for the different phases is performed assuming complete build out condition of the development for the purpose of planning. Table 16 presents the proposed internal distribution for different phases of the development.

Table 16 - Internal Trip Distribution by Phase during the P.M. Peak Hour

Roadway	Phase I (Peak Hour Volumes)	Phase II (Peak Hour Volumes)	Phase III (Peak Hour Volumes)	2015 Peak Hour Volumes	2015 ADT Volumes	Phase IV (Peak Hour Volumes)	Phase V (Peak Hour Volumes)	Phase VI (Peak Hour Volumes)	Phase VII (Peak Hour Volumes)	2025 Peak Hour Volumes	2025 ADT Volumes
East Loop Road (Section 1)	1,500	0	0	1,500	16,667		0	50	0	1,550	17,222
East Loop Road (Section 2)	1,000	1,500	0	2,500	27,778	250	0	50	0	2,800	31,111
East Loop Road (Section 3)	0	500	0	500	5,556	1,500	0	50	0	2,050	22,778
West Loop Road (Section 1)	750	0	0	750	8,333	0	0	50	0	800	8,889
West Loop Road (Section 2)	500	0	0	500	5,556	0	0	50	0	550	6,111
West Loop Road (Section 3)	0	0	1,500	1,500	16,667	0	0	50	0	1,550	17,222
Aztec Road Extension	1,000	1,000	500	2,500	27,778	250	100	0	500	3,350	37,222
Aztec Road (South of Roundabout)	1,000	1,000	500	2,500	27,778	250	100	0 .	500	3,350	37,222
Mobile Road Extension	1,000	0	0	1,000	11,111	0	0	0	500	1,500	16,667
Hualapai Drive Extension	500	0	250	750	8,333	0	0	400	0	1,150	12,778
Cerbat Road Extension	0	0	500	500	5,556	0	0	400	0	900	10,000
Ramada Road Extension	0	0	1,000	1,000	11,111	0	100	0	0	1,100	12,222
Indian Wells Road Extension	0	0	500	500	5,556	0	200	0	0	700	7,778
Sacramento Road Extension	500	1,000	1,000	2,500	27,778	0	250	0	0	2,750	30,556
Centennial Road Extension	0	500	0	500	5,556	2,000	0	0	0	2,500	27,778
Tampico Road Extension	0	0	0	0	0	2,000	0	0	0	2,000	22,222
TC Connecter	200	2,000	0	2,200	24,444	0	0	0	0	2,200	24,444
Bacobi Road Extension	1,500	1,500	0	3,000	33,333	250	0	0	100	3,350	37,222
East Middle Road	0	250	0	250	2,778	500	0	0	0	750	8,333

East Loop Road

Section 1 - Between Roundabout and Bacobi Road Extension

Section 2 - Between Bacobi Road Extension and Centennial Road

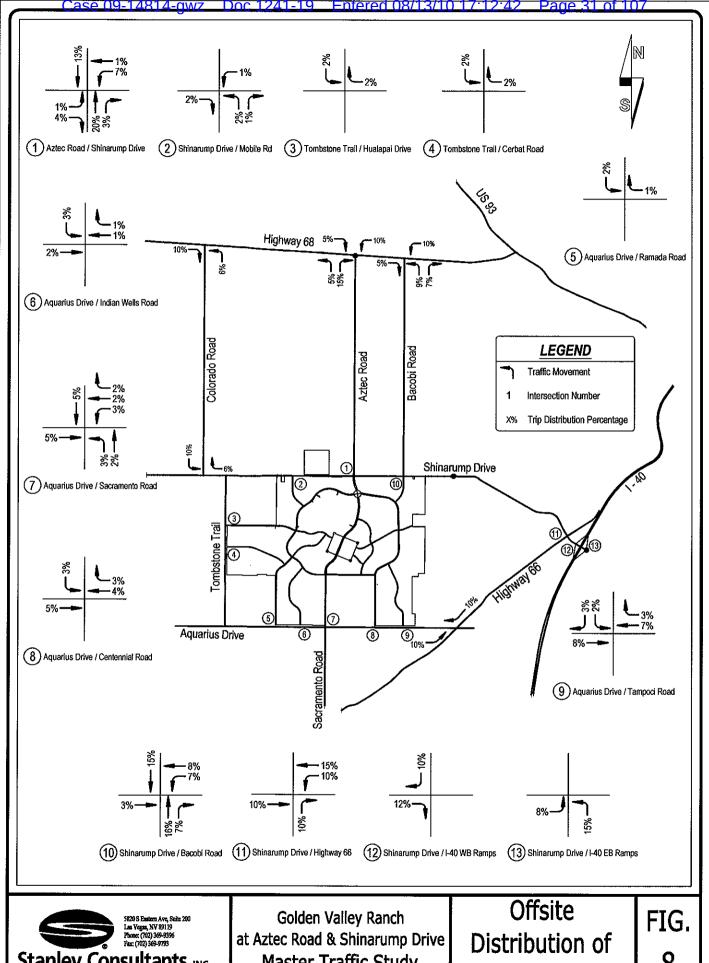
Section 3 - Between Centennial Road and Sacramento Road

West Loop Road

Section 1 - Between Roundabout and Mobile Road Extension

Section 2 - Between Mobile Road Extension and Ramada Road

Section 3 - Between Centennial Road and Sacramento Road

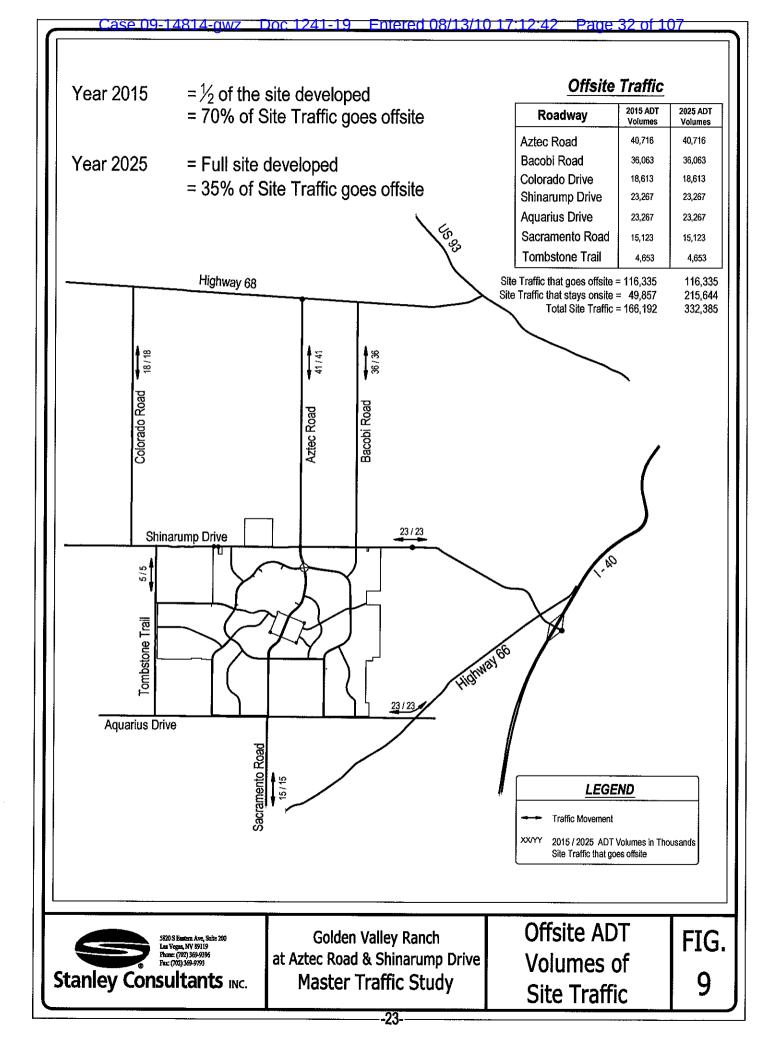


Stanley Consultants INC.

Master Traffic Study

Site Traffic

8



ROADWAY SEGMENT

PHASE 1

- AZTEC RD. SOUTH FROM SHINARIMP TO SOUTH OF PRET ROUND-ABOUT. WEST LOOP RD. WEST FROM ROUND-A BOUT TO POD 1 ENTRY. EAST LOOP RD. EAST FROM ROUND-ABOUT TO POD 6 ENTRY.

- EAST LOOP RD. EAST FROM POD 1 ENTRY TO TOWN CENTER CONNECTOR RD.
 TO CONNECTOR RD. BAST FROM WEST LOOP RD. TO ACTED RD. AT TOWNCENTER.
 AZTEC RD. NORTH FROM TOWNCENTER CONNECTOR RD. TO POD 2 ERBODS ENTRY.
 AZTEC RD. NORTH FROM POD 2 ERBOSE ENTRY TO SOUTH OF FRIST ROUND-ABOUT.
 EAST LOOP RD. EAST FROM POD 3 ENTRY RD. TO EAST TOWNCENTER CONNECTOR RD.
 APARTMENT CONNECTOR NORTH FROM EAST LOOP RD. TO SHARMAR RD.

- 800 SHINARUMP RD. BAST FROM AZTEC RD. TO YUMA RD.
 810 SHINARUMP RD. EAST FROM AZTEC RD. TO YUMA RD.
 812 EAST TOWN CENTERCONNECTOR RD. EAST FROM EAST LOOP RD. TO OUT PARCEL.
- 813 WEST LOOP FID. SOUTH FROM WEST TOWN CENTER CONNECTOR RD. TO RAMADA RD. 814 HUALAPAI DRIVE WEST FROM WEST LOOP RD. TO RAMADA RD.
- 815 MOBILE ROAD NORTH FROM WEST LOOP RD. TO 19 MILE WASH

PHASE 2

EAST LOOP FD. - SOUTH FROM EAST TOWN CENTER CONNECTOR RD. TO TAMPICO RD. TOWN CENTER CONNECTOR RD. - WEST FROM EAST LOOP RD. TO EAST MIDDLE RD.

- AZTEC ROAD SOUTH PROMITC CONNECTOR RD. TO LOOP ROAD
- WEST LOOP FIX WEST FROM 2nd ROUND-ABOUT TO RAMADA ROAD.

 RAMADA ROAD EAST FROM WEST LOOP RD. TO WEST TOWN CENTER CONNECTOR RD.
- NOVAN WELLE ROAD SOUTH FROM WEST LOOP RD. TO HOLY MOSES WASH.
 RAMADA ROAD SOUTH FROM WEST LOOP RD. TO HOLY MOSES WASH.
 CEREAT DRIVE WEST FROM RAMADA RD. TO 13 MLE WASH.

- WEST LOOP FID. EAST FROM 2nd ROUND-ABOUT TO CENTENNAL ROAD WEST LOOP FID. EAST FROM CENTENNAL RID. TO TAMPICO ROAD. TAMPICO ROAD SOUTH FROM WEST LOOP FID. TO AGURRUS CRIVE. CENTENNAL ROAD SOUTH FROM WEST LOOP FID. TO AGURRUS DRIVE. AGUARIUS DRIVE EAST FROM CENTENNAL RD. TO TAMPICO ROAD.



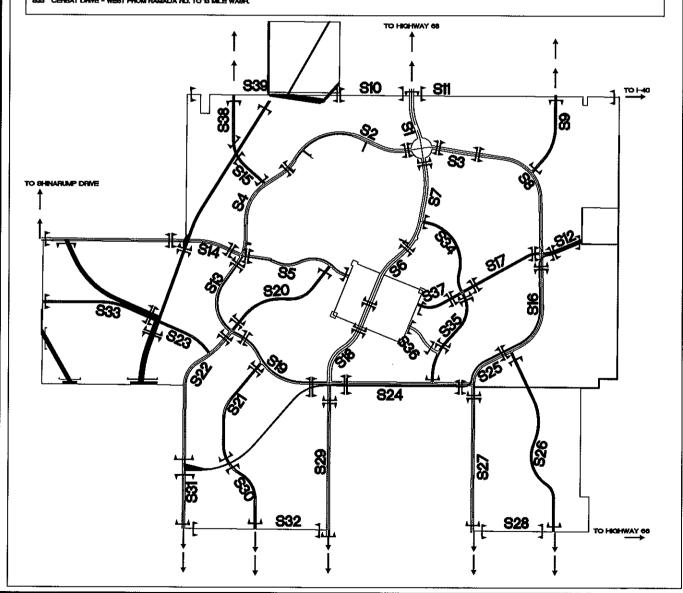
- SACRAMENTO ROAD SOUTH FROM 2nd ROUND-ABOUT TO AQUARIUS DRIVE. INDIAN WELLS ROAD SOUTH FROM HOLY MOSES WASH TO AQUARIUS DRIVE.
- RAMADA ROAD BOUTH FROM HOLY MOSES WASH TO ACUARIUS DRIVE. AQUARIUS DRIVE WEST FROM SACRAMENTO RD. TO RAMADA ROAD.

PHASE 6

833 CERBAT DRIVE - WEST FROM 13 MILE WASH TO TOMBSTONE TRAIL

PHASE 7

- EAST MIDDLE RD. BETWEEN AZTEC RD. AND TO CONNECTOR RD. BAST MIDDLE RD. BETWEEN TO CONNECTOR RD. AND LOWER TO CONNECTOR RD. LOWER TO CONNECTOR BAST FROM TC. TO BAST MIDDLE RD.
- EAST TO CONNECTOR RO. EAST FROM TO CONNECTOR RD. TO EAST MIDDLE RD MOBILE ROAD NORTH FROM 13 MILE WASH TO SHAVARUMP ROAD.
- SHINARUMP ROAD WEST FROM AMADO RD. TO RAMADA ROAD.





Golden Valley Ranch at Aztec Road & Shinarump Drive Master Traffic Study

Roadway Segments FIG. 10

CHAPTER 5 - BACKGROUND TRAFFIC

The build out year for the proposed development is estimated to be year 2025. As per the guidelines provided in the ADOT Traffic Impact Analysis Standards, traffic mitigation is required for the opening year of each phase, 5 years after opening and 15 years after opening. It is also suggested that an analysis of the horizon year for 5 years after opening is not required if the traffic impacts are fully mitigated 10 or 15 years after opening with existing conditions plus 5year programmed improvements. As information regarding the opening of each phase is unknown at this time, the traffic analysis and identification of mitigation measures are performed for the year 2015 when the development is proposed to be half complete, the year of completion 2025, and 15 years after opening of the development. To estimate the future traffic volumes and to determine the number of lanes required on the major roadways around the proposed development, historical data on traffic counts in the region were obtained from ADOT. The historical ADOT traffic count data along Highway 68 between Verde Road and US 93 was initially used to determine the historical growth rate for the region. The historical data obtained from ADOT is plotted on Figure 11. A linear regression model/trend line was used to obtain the growth rate. From the linear regression or trend line, it was determined that the AADT volumes for the years 1992 through 2004 grow at an annual growth rate of less than 2%. Rather than using such a low growth rate, it was assumed that the future growth rate for the area roadways will be 5%.

Traffic volumes on roadways around the project site were projected for the horizon years identified. The traffic volumes on the various roadways around the project site were obtained from the Mohave County Public Works Division. It is assumed that Aquarius Drive will have similar background volumes as Shinarump Drive for the horizon years, and Sacramento Drive, Centennial Road and Ramada Road are assumed to have similar background volumes as Aztec Road to the north of Shinarump Drive. Using the 5% growth rate and the current volumes available, the projected traffic volumes are presented in Table 17.

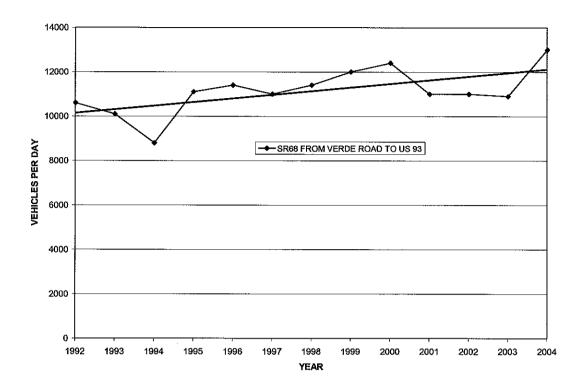
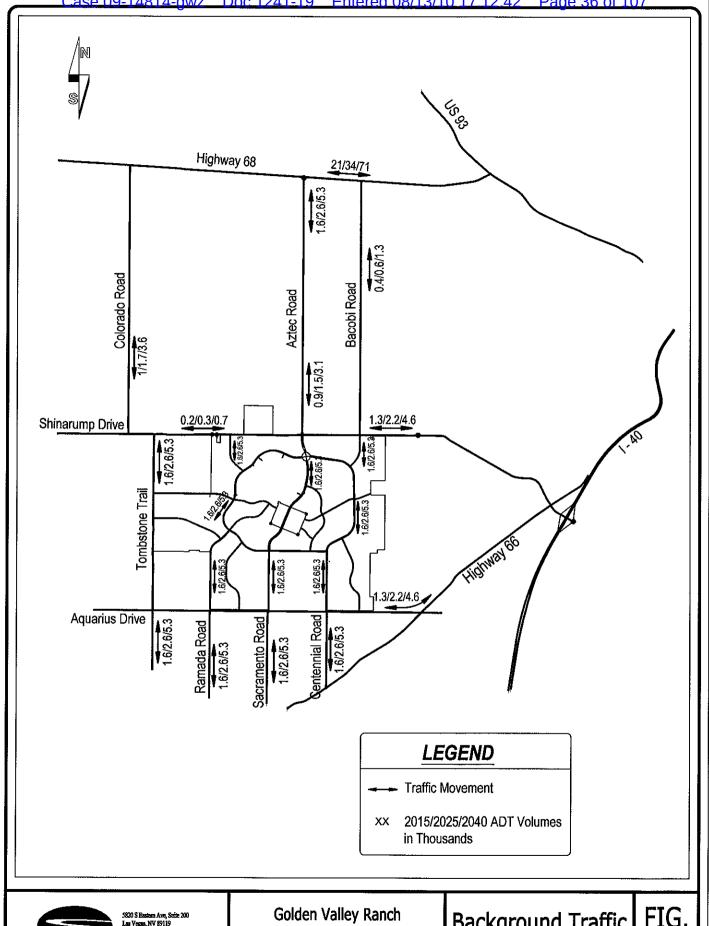


Figure 11 – AADT Volumes on SR 68 between Verde Road and US 93

Background traffic on Sacramento Road, Centennial Road and Ramada Road are assumed to use the roadways within the community to get to State Route 68. Figure 12 presents background traffic volumes for the study horizons on the major roadways within and around the community.

Table 17 – Existing and Project Traffic Volumes on County Roadways

Roadway	Direction	irection Location 2003 Volumes (ADT)		2015 Projected Volumes (ADT)	2025 Projected Volumes (ADT)	2040 Projected Volumes (ADT)	
Highway 68	E-W	Between Verde Rd & US 93	11,700	21,012	34,226	71,152	
Colorado Road	N-S	2010' south of Highway 68	596	1,070	1,743	3,625	
Aztec Road	N-S	0.1 mile south of Highway 68	877	1,575	2,565	5,333	
Aztec Road	N-S	0.1 mile north of Shinarump Road	513	921	1,501	3,120	
Bacobi Road	N-S	1 mile north of Shinarump Drive	211	379	617	1,283	
Shinarump Road	E-W	480' west of Aztec Road	106	190	310	645	
Shinarump Road	E-W	1660' north of Oatman Road	753	1,352	2,203	4,579	
Aquarius Drive	E-W		-	1,352	2,203	4,579	
Sacramento Road	N-S		-	1,575	2,565	5,333	
Centennial Road	N-S		_	1,575	2,565	5,333	
Ramada Road	N-S		-	1,575	2,565	5,333	





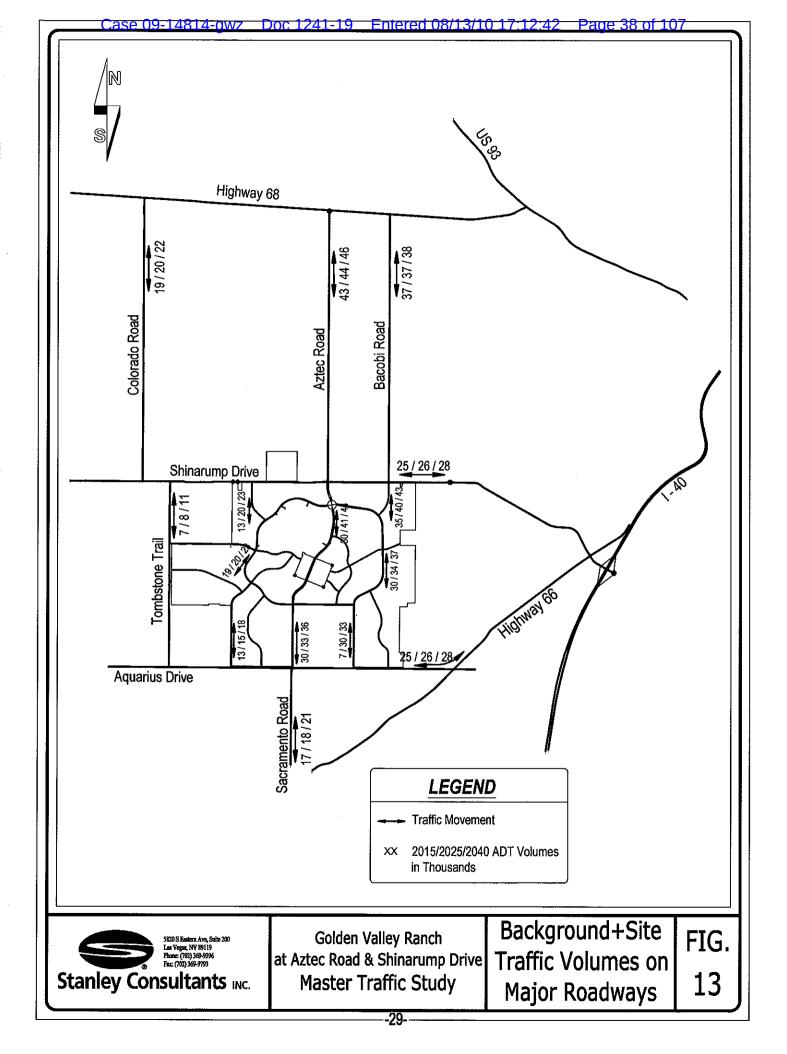
Golden Valley Ranch at Aztec Road & Shinarump Drive Master Traffic Study

Background Traffic on Major Roadways

FIG.

CHAPTER 6 – FORECAST TRAFFIC VOLUMES

The forecast traffic volumes for the study horizon years were determined by combining the site traffic and the background volumes. Figure 13 presents the ADT volumes on various roadways inside and outside the proposed Golden Valley Ranch Community for the years 2015, 2025 and 2040. These forecast volumes were used to perform the planning analysis.



CHAPTER 7 - TRAFFIC ANALYSIS

PLANNING ANALYSIS

The future traffic volumes were developed in Chapter 6. As suggested in the ADOT traffic study guidelines, the ADT volumes were estimated for the years 2015, 2025 and 2040. A planning analysis was performed using the HCS+ software to determine the basic number of lanes for various roadways. The following assumptions were made in performing the arterial analysis using the Highway Capacity Software (HCS+)

- The signal cycle length is 90 seconds.
- The green to cycle (g/c) ratio of 0.60.
- The directional distribution is 0.5.
- All the major roadways within and outside the community have medians and left turn bays at major intersections.
- All the roadway segments analyzed are assumed to be signalized at either end.
- Major roadways are classified as urban class 2 and the interior roadways are classified as urban class 3.
- The number of lanes and design speed (free flow speed) are planned based on the traffic volumes to achieve a desirable LOS.

The planning analyses were performed using the P.M. peak hour volumes, as the offsite trips are higher during the P.M. peak hour compared to the other peak hours. Table 18 presents a summary of the planned number of lanes, design speed and the achieved LOS for the horizon years on the exterior roadways. Table 19 presents a summary of the planned number of lanes, design speed and achieved LOS for the horizon years on the interior roadways. The results may be slightly over rated because of the assumption that each of the roadway segments analyzed are assumed to be signalized at either end. The results from the HCS analysis are attached in the Appendix B. As can be observed the LOS on all the interior and exterior roadways is within the acceptable limits.

Table 18 - Results from HCS Analysis for Exterior Roadways

Roadway	Number of Lanes	Design Speed (mph)	2015 LOS	2025 LOS	2040 LOS
Aquarius Drive	4	40	A	A	A
Aztec Road	6	45	A	A	A
Bacobi Road	4	45	A	A	A
Colorado Road	4	45	Α	Α	A
Sacramento Road	4	40	A	A	A
Shinarump Road	6	45	A	A	A
Tombstone Trail	4	40	A	A	A

Table 19 - Results from HCS Analysis for Interior Roadways

Roadway	Number of Lanes	Design Speed (mph)	2015 LOS	2025 LOS	2040 LOS
Aztec Road Extension	6	45	A	Α	Α
Bacobi Road Extension	4	35	В	В	В
Centennial Road Extension	4	35	A	В	В
Cerbat Road Extension	4	35	A	Α	Α
East Loop Road	4	35	В	В	В
East Middle Road	4	30	В	В	В
Hualapai Drive Extension	4	30	В	В	В
Indian Wells Road Extension	4	30	В	В	В
Mobile Road Extension	4	35	В	В	В
Ramada Road Extension	4	35	A	A	A
Sacramento Road Extension	6	45	A	В	В
Town Center Connector	4	30	В	В	В
West Loop Road	4	35	В	В	В

The typical Mohave County roadways cross sections are proposed to be used for the roadways outside the community. The Mohave County typical roadway cross sections are provided in the technical appendix. Stanley Consultants and Rhodes Homes, Arizona coordinated with Mohave County Public Works in developing project specific roadway cross sections inside the community. The typical roadway cross sections are included in the technical appendix. The intersections of major arterials are proposed to be developed as per the City of Mesa standards, which are also included in the technical appendix.

ROUNDABOUT DESIGN

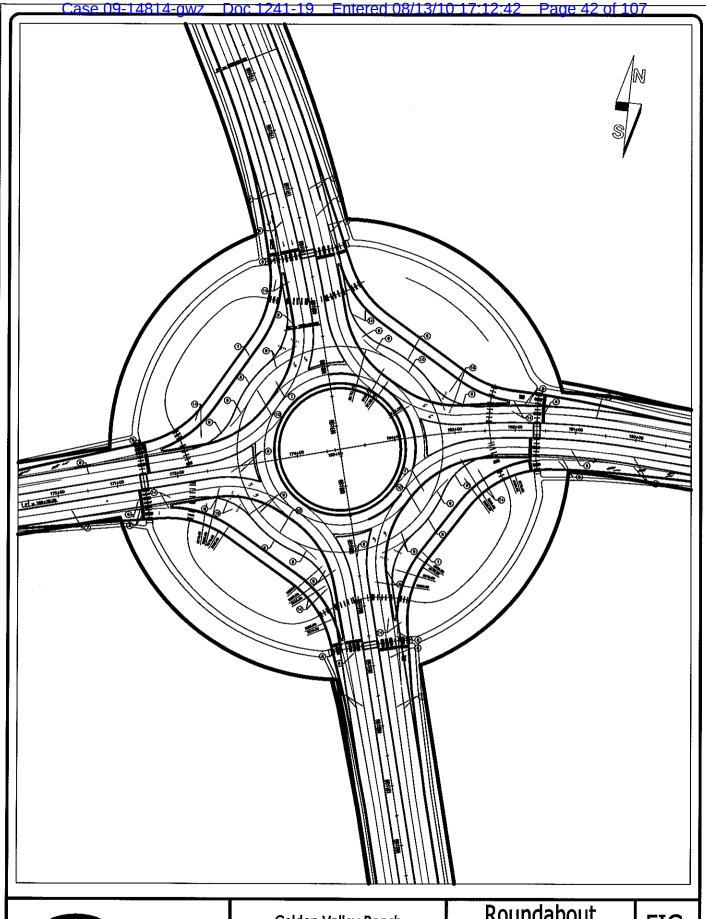
The intersection of Aztec Road Extension and Loop Road in the north of the community is proposed to be a roundabout instead of a signalized intersection. Roundabouts are proven in many cases to be safer than signalized intersections. The roundabout will be designed using the British "RODEL" software and it will be designed to provide am excellent LOS in the ultimate

conditions (year 2040). The interim roundabout will be designed so that it can be easily widened to accommodate the ultimate year 2040 volumes. The P.M. peak hour traffic volumes will be the design hour volumes.

The major design factors in the design of the roundabout are:

- Entry Radius
- Exit Radius
- Inscribed Circle Diameter
- Approach and Intersection Sight Distances
- Flaring of Entry Roadway
- Design Speed

All the above mentioned criteria will require detailed traffic volumes and detailed geometric analyses. Figure 14 provides a preliminary conceptual design of the roundabout. The ultimate configuration of the roundabout is envisioned to include two lanes with a bypass lane for the right turn movements on all approaches. As per a preliminary analysis performed using RODEL a roundabout design software, the conceptual roundabout is proposed to provide a LOS of B or C for the traffic during the P.M. peak hour in the year 2040.





Golden Valley Ranch at Aztec Road & Shinarump Drive Master Traffic Study Roundabout Preliminary Conceptual Design

FIG. 14

CHAPTER 8 – CONCLUSIONS AND RECOMMENDATIONS

Recommendations provided in the Traffic Analysis section the roadways for the interim and ultimate conditions. As per Mohave County Standards for the preparation and Evaluation of Traffic Impact Analyses and ADOT guidelines, a traffic impact analysis will be performed for each phase of the proposed master planned community. An operational capacity analyses will be performed for the identified study intersections by phase to determine satisfactory cross sections, number of lanes as well as traffic control at these intersections in the phase wise traffic impact analyses.

Appendix A

Analyses Worksheets

GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - OVERALL TRIP GENERATION A.M. PEAK HOUR

Land Use Code	Description	Quantity	Units	Trip Gen. Period	Daily Trips	Peak Hour Trips	Enter	Exit
210	Single Family Dwelling Units	9,341	na	AM Peak	77,919	5,916	1,479	4,437
220	Apartment	1,539	na	AM Peak	17,163	1,259	252	1,007
232	High Rise Condominiums	10,000	na	AM Peak	12,540	905	172	733
251	Senior Adult Housing-Detached	13,675	na	AM Peak	65,700	2,824	1,073	1,751
412	County Park	74.1	Acres	AM Peak	542	2	2	0
430	Golf Course	276.5	Acres	AM Peak	1,257	48	36	13
520	Elementary School	500	Students	AM Peak	645	210	116	95
522	Middle School	800	Students	AM Peak	1,296	424	233	191
530	High School	1,500	Students	AM Peak	2,565	615	424	191
710	General Office Building	3,163.2	KSF	AM Peak	34,662	4,880	4,294	586
820	Shopping Center	2,041.9	KSF	AM Peak	88,835	2,131	1,300	831
				TOTALS:	303,125	19,214	9,380	9,833



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE I TRIP GENERATION A.M. PEAK HOUR

				·		1	I	Peak hour	Trips	
Parcel Number	Land Use Code	Description	Quantity	Units	Trip Gen. Period	Daily Trip Rates	Daily Trips	Average Rate / Regression Equation	Enter	Exit
1	251	Senior Adult Housing-Detached	850	DU	AM Peak	3.71	3,154	Ln(T)=0.86Ln(X)-0.63 176	38% 67	62% 109
2	251	Senior Adult Housing-Detached	815	DU	AM Peak	3.71	3,024	Ln(T)=0.86Ln(X)-0.63 170	38% 65	62% 105
3	210	Single Family Dwelling Units	151	DU	AM Peak	9.57	1,445	T =0.7(X)+9.43 115	25% 29	75% 86
4	210	Single Family Dwelling Units	271	DU	AM Peak	9.57	2,593	T =0.7(X)+9.43 199	25% 50	75% 149
5	210	Single Family Dwelling Units	262	DU	AM Peak	9.57	2,507	T =0.7(X)+9.43 193	25% 48	75% 145
7	220	Apartment	1,539	DŲ	AM Peak	6.72	10,342	T =0.49(X)+3.73 758	20% 152	80% 606
8	210	Single Family Dwelling Units	337	DU	AM Peak	9.57	3,225	T =0.7(X)+9.43 245	25% 61	75% 184
9	210	Single Family Dwelling Units	332	DU	AM Peak	9.57	3,177	T =0.7(X)+9.43	25% 60	75% 181
10	210	Single Family Dwelling Units	405	DU	AM Peak	9.57	3,876	T =0.7(X)+9.43 293	25% 73	75% 220
11	210	Single Family Dwelling Units	297	DU	AM Peak	9.57	2,842	T =0.7(X)+9.43	25% 54	75% 163
54	251	Senior Adult Housing-Detached	231	DŲ	AM Peak	3.71	857	Ln(T)=0.86Ln(X)-0.63 57	38% 22	62% 36
55	251	Senior Adult Housing-Detached	207	DU	AM Peak	3.71	768	Ln(T)=0.86Ln(X)-0.63 52	38% 20	62%
59	251	Senior Adult Housing-Detached	250	DU	AM Peak	3.71	928	Ln(T)=0.86Ln(X)-0.63	38% 23	62% 38
60	251	Senior Adult Housing-Detached	416	DU	AM Peak	3.71	1,543	Ln(T)=0.86Ln(X)-0.63	38% 36	62% 59
61	251	Senior Adult Housing-Detached	263	DU	AM Peak	3.71	976	Ln(T)=0.86Ln(X)-0.63 64	38% 24	62% 40
62	251	Senior Adult Housing-Detached	169	DŲ	AM Peak	3.71	627	Ln(T)=0.86Ln(X)-0.63	38% 17	62%
	412	County Park	14.0	Acres	AM Peak	2.28	32	0.01 0	80%	20% 0
	520	Elementary School	500	Students	AM Peak	1.29	645	0.42 210	55% 116	45% 95
	522	Middle School	800	Students	AM Peak	1.62	1,296	0.53 424	55% 233	45% 191
	530	High School	1,500	Students	AM Peak	1.71	2,565	0.41 615	69% 424	31% 191
	430	Golf Course	249.5	Acres	AM Peak	5.04	1,257	Ln(T)=0.63Ln(X)+0.40	74% 36	26%
	232	High-Rise Condominiums	2,627	DU	AM Peak	4.18	3,294	T =(0.29(X)+28.86)*0.3 237	19% 45	81% 192
	820	Shopping Center	265.4	KSF	AM Peak	42.94	11,395	1.03	61% 167	39% 107
	I					TOTALS:	62,368	4,791	1,822	2,969

GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE II TRIP GENERATION A.M. PEAK HOUR

100.00	A CIT Page					i		Peak Hour Trips	Trips	
Number	Code	Description	Quantity	Units	nip Gen. Period	Daily I rip Rates	Dally Trips	Average Rate / Regression Equation	Enter	Exit
ر ا	210	stial I paillew? Vime a eloai?	525	_	AND DOOK	0.57	5 024	T =0.7(X)+9.43	25%	75%
2	0	Chigae i animiy Dwoming China	020	50	אואו ר כמא	9.07	5,024	222	94	283
16	210	Single Family Dwelling Units	5,67		JEOG MA	9 57	F 106	T =0.7(X)+9.43	72%	%97
2)	Simo Brillian Largino	30	50	אואו ו כמג	9.01	0,440	406	102	305
17	210	Single Family Dwelling Light	270	Ē	ACAG MA	0.57	2 670	T =0.7(X)+9.43	25%	42%
)		210	3	חשה ו שה	0.0	2,010	205	51	154
2	210	Sipole Eamily Dwelling Units	250	Ž	AND DOOL	0 57	2 250	T =0.7(X)+9.43	25%	%5 <i>L</i>
2	2 1		3	2	אוא ו כמה	9.0	0,000	254	64	191
10	210	Single Family Dwelling Unite	202	1	ACOG MA	0.57	2 764	T =0.7(X)+9.43	25%	75%
2	2 7	Cirigio I arring Cirigio	000	20	אואו ד כמה	9.07	3,101	285	71	213
2	210	Single Family Dwelling Units	673	ĩ	ACOD MA	0.67	6 111	T =0.7(X)+9.43	25%	75%
3	2.3		2	3	אור כמה	3.01	0,44	481	120	360
2	210	Single Family Dwelling Unite	363	Ē	AM Dook	0 57	3 171	T =0.7(X)+9.43	25%	75%
1	2	Chigae i chimi di chica	200	3	און ר כמה	9.0	0,474	264	99	198
	412	County Pack	7.0	Acros	AM Dook	2.28	16	0.01	%08	20%
	-	county) and	2.,	20	AWI I COM	2:50	- 2	0	0	0
	412	Town Center Park	F2 4	Acros	AM Dool	866	100	0.01	%08	20%
	+	omi center i ann	1.50	70,63	אווין בפע	۵.4.	122	1	0	0
	232	High-Rise Condominiums	3 061	Ē	JOOG NAV	1 18	7 067	T =(0.29(X)+28.86)*0.3	19%	81%
	404		0,0	3	שואו ו במע	r r	1,007	353	29	286
	820	Shonning Center	4002	KSE	AM Dook	42 04	17 185	1.03	61%	39%
	220	onopping como	700.5	20	ANT LOGIN	14.01	11,100	412	251	161
						TOTALS:	52,435	3,037	887	2,150



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE III TRIP GENERATION A.M. PEAK HOUR

Parcel	l and Use				Trin Con	Doily Trip	1	Peak hour Trips	Trips	
Number	Code	Description	Quantity	Units	Period	Pally ITIP Rates	Trips	Average Rate / Regression Equation	Enter	Exit
33	220	Apartment	1,015	DO	AM Peak	6.72	6.821	T =0.49(X)+3.73	20%	80%
-				1				501	100	401
39	251	Senior Adult Housing-Detached	196	חמ	AM Peak	3.74	7.07	Ln(T)=0.86Ln(X)-0.63	38%	62%
		6	3	3	NDO 1 1111 /	-	14.	50	19	31
40	251	Senior Adult Housing-Defached	297	2	AM Peak	3.71	1 102	Ln(T)=0.86Ln(X)-0.63	38%	62%
		8	2	3	A LINE	-	1,102	71	27	44
41	251	Senior Adult Housing-Defached	611		AM Peak	3 74	7966	Ln(T)=0.86Ln(X)-0.63	38%	62%
		6	;	3	VIDO 1 IAT /		2,201	133	20	82
42	251	Senior Adult Housing-Defached	416	2	AM Peak	3.71	1 543	Ln(T)=0.86Ln(X)-0.63	38%	62%
				}		-	2.	95	36	59
43	251	Senior Adult Housing-Defached	591		AM Deak	3.74	2 103	Ln(T)=0.86Ln(X)-0.63	38%	62%
			3	2	rivi i cent		6,130	129	49	80
44	251	Senior Adult Housing-Detached	425		AM Peak	3.71	1.577	Ln(T)=0.86Ln(X)-0.63	38%	62%
						-		97	37	90
45	251	Senior Adult Housing-Defached	407	2	AM Peak	3.71	1.510	Ln(T)=0.86Ln(X)-0.63	38%	62%
		6	•	3	All Call	-	5,	93	36	58
46	251	Senior Adult Housing-Defached	485		AM Peak	3.74	1 799	Ln(T)=0.86Ln(X)-0.63	38%	62%
))	, , ,		1,100	109	41	29
53	251	Senior Adult Housing-Detached	297		AM Peak	3.74	1 100	Ln(T)=0.86Ln(X)-0.63	38%	62%
	in the state of th	6)	, an ,	-	', 102	71	27	44
	412	County Park	7.0	Acres	AM Deak	200	4	0.01	%08	20%
			?	200	ANA I CON	2.3.7		0	0	0
	232	High-Rise Condominiums	1 365	<u>-</u>	AM Deak	4 18	1 719	T =(0.29(X)+28.86)*0.3	19%	81%
			0001.	2	, we come	2	1,1 14,	127	24	103
	820	Shopping Center	137.9	KSF	AM Peak	42 94	5 924	1.03	61%	39%
		5					0,04.7	142	87	55
						TOTALS:	28,292	1,619	533	1,085



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE IV TRIP GENERATION A.M. PEAK HOUR

			Trin Gan	Daily Trin	Daily	Peak Hour Trips	Trips	
Description	Quantity	Units	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
ingle Family Dwelling Holfe	020	-	APA Dook	0.67	2 501	T =0.7(X)+9.43	25%	75%
ourgie I annis eweimig omis	210	2	אואו ר פמה	9.07	7,004	198	50	149
Single Family Dwelling Units	244	2	AM Deak	9.57	2 225	T =0.7(X)+9.43	25%	75%
	1 1 7	3	אוין בשוע	6:0	2,000	180	45	135
Single Family Dwelling Units	264	2	AM Peak	9.57	2 526	T =0.7(X)+9.43	25%	75%
	-27	2	אוין כמוע	6:0	۵,040	194	49	146
Single Family Dwelling Units	535	2	AM Deak	9.57	5 120	T =0.7(X)+9.43	25%	75%
	222	3	אואי ו כמוג	6.6	0,120	384	96	288
Single Family Dwelling Units	206	<u>-</u>	AM Deak	9.57	2 833	T =0.7(X)+9.43	25%	75%
Chigie I amily eweiling chins	222	3	אורו כמה	3.31	4,000	217	54	162
Single Family Dwelling Linits	200	<u></u>	AM Deak	9 57	2 861	T =0.7(X)+9.43	25%	75%
	223	3	אואו ו פמוע	0.0	2,00	219	55	164
Single Family Dwelling Inite	316	2	AM Deak	9 57	3 004	T =0.7(X)+9.43	25%	75%
Chigie I dinity Dwelling Clines	200	3	אויי פפוי	9.9	3,027	231	58	173
Single Family Dwelling Units	224	<u></u>	AM Dook	9 57	2 144	T =0.7(X)+9.43	25%	75%
Cingle i cining Coming Cinica	4.6.7	2	אוין כמוע	5.01	4,144	166	42	125
General Office Building	506.4	KOE	ANDOSK	11 01	5 575	1.55	88%	12%
Certeral Office Durining	000 	2	און ר כמה	0.1	0,0,0	785	691	94
General Office Building	5718	KOE	ACOU MA	7.04	800 8	1.55	88%	12%
	2:1.2	2	אווו פמע	0.1	0,530	886	780	106
General Office Building	851 Q	K	ACOU MA	7.0	0 380	1.55	88%	12%
Selicial Cilice Dallalling	5.100	2	און כפע	0:	000,6	1320	1162	158
Commercial (Shonning Center)	303.4	KSE	AEOG MV	10 01	12.015	1.03	61%	39%
Commercial (Orlopping Center)	000	2	און בפג	72.37	0,0,0	312	190	122
High-Rise Condominiums	2 047	2	AM Deak	4 18	2 567	T =(0.29(X)+28.86)*0.3	19%	81%
	-; -; -	3	VIDO I MIN	?	7,001	187	35	151
Shonping Cepter	206 9	X H V	AM Deak	42 04	888	1.03	61%	39%
oropping contain	500.5	2	אואו ו פפוע	16.27	0,001	213	130	83
				TOTALS:	69,144	5,493	3,436	2,057
	Single Family Dwelling Units General Office Building General Office Building General Office Building High-Rise Condominiums Shopping Center	ar)	Quantity 270 270 244 264 264 535 296 296 296 296 296 296 296 296 296 296 296 296 296 296 296 206.4 206.9	Quantity Units 270 DU 244 DU 264 DU 296 DU 299 DU 224 DU 506.4 KSF 571.8 KSF 851.9 KSF 2,047 DU 206.9 KSF	Quantity Units Period 270 DU AM Peak 244 DU AM Peak 264 DU AM Peak 296 DU AM Peak 299 DU AM Peak 224 DU AM Peak 506.4 KSF AM Peak 571.8 KSF AM Peak 851.9 KSF AM Peak 2,047 DU AM Peak 2,047 DU AM Peak 2,047 DU AM Peak	Quantity Units Period Period Period Rates 270 DU AM Peak 9.57 244 DU AM Peak 9.57 296 DU AM Peak 9.57 299 DU AM Peak 9.57 224 DU AM Peak 9.57 224 DU AM Peak 9.57 506.4 KSF AM Peak 11.01 851.9 KSF AM Peak 11.01 851.9 KSF AM Peak 42.94 2,047 DU AM Peak 42.94 206.9 KSF AM Peak 42.94	Quantity Units Trips Trips 270 DU AM Peak 9.57 2,584 244 DU AM Peak 9.57 2,584 264 DU AM Peak 9.57 2,526 296 DU AM Peak 9.57 2,833 299 DU AM Peak 9.57 2,861 224 DU AM Peak 9.57 2,144 506.4 KSF AM Peak 9.57 2,144 506.4 KSF AM Peak 11.01 6,296 851.9 KSF AM Peak 11.01 9,380 851.9 KSF AM Peak 42.94 13,015 2,047 DU AM Peak 4.18 2,567 2,06.9 KSF AM Peak 42.94 8,884	Quantity Units Period Period Rates Rates Equation Trips Average Rate / Regression 270 DU AM Peak 9.57 2,584 T=0.7(X)+9.43 244 DU AM Peak 9.57 2,335 T=0.7(X)+9.43 264 DU AM Peak 9.57 2,526 T=0.7(X)+9.43 296 DU AM Peak 9.57 2,833 T=0.7(X)+9.43 299 DU AM Peak 9.57 2,833 T=0.7(X)+9.43 224 DU AM Peak 9.57 2,144 T=0.7(X)+9.43 506.4 KSF AM Peak 9.57 2,144 T=0.7(X)+9.43 506.4 KSF AM Peak 11.01 5,575 T=0.7(X)+9.43 506.4 KSF AM Peak 11.01 5,575 T=0.7(X)+9.43 851.9 KSF AM Peak 11.01 9,380 1.55 851.9 KSF AM Peak 42.94 13,015 10.33 2,047 DU AM



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE V TRIP GENERATION A.M. PEAK HOUR

Parcel	Parcel Land Use				Trin Gan	Daily Trib) Alica	Peak Hour Trips	Trips	
Number	Code	Description	Quantity	Units	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
34	251	Senior Adult Housing-Detached	472	<u></u>	AM Deak	3.74	1 751	Ln(T)=0.86Ln(X)-0.63	38%	62%
)		7	2	MINI I COIN		0 2 -	106	40	99
35	251	Senior Adult Housing-Detached	510	Ē	AM Dask	3 71	1 025	Ln(T)=0.86Ln(X)-0.63	38%	62%
3			212	2	אויין כמוג		0.25,1	115	44	71
36	251	Senior Adult Housing-Detached	524	<u>-</u>	AM Deak	374	1 0//	Ln(T)=0.86Ln(X)-0.63	38%	62%
3	; 		750	3	AW I COM	0.7	1,0,1	116	44	72
37	251	Senior Adult Housing-Detached	253	<u></u>	AM Dook	3 74	030	Ln(T)=0.86Ln(X)-0.63	38%	62%
;	: }}		500	3	חשט ו שט	0.7	200	62	24	39
38	251	Senior Adult Housing-Defached	298	Ē	AM Deak	3.71	1 106	Ln(T)=0.86Ln(X)-0.63	38%	62%
			200)	AND I COLL		20.	71	27	44
						TOTALS:	7,665	471	179	292



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE VI TRIP GENERATION A.M. PEAK HOUR

Parcel	Parcel and se				Trin Con		. Head	Peak Hour Trips	Trips	
Number	Code	Description	Quantity	Onits	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
47	251	Senior Adult Housing	አጻዳ	110	AM Dook	2.74	2 050	Ln(T)=0.86Ln(X)-0.63	38%	62%
) 	8	222	2	יייי ו כמוע	-	600,7	122	46	9/
48	251	Senior Adult Housing-Detached	475	_	AM Dook	374	1 760	Ln(T)=0.86Ln(X)-0.63	38%	62%
			2	2	No. I No.		1,102	107	41	99
49	251	Senior Adult Housing-Detached	122	2	AM Deak	3 74	153	Ln(T)=0.86Ln(X)-0.63	38%	62%
!			77-	2	Night Colle		5	33	13	21
20	251	Senior Adult Housing-Detached	404	=	AM Deak	3 71	1 100	Ln(T)=0.86Ln(X)-0.63	38%	62%
;		POLONIA BUILDON STATE OF THE POLONIA BUILDING STATE OF THE POLONIA	-	3	TIME COM	7.70		93	35	28
, 2,	251	Senior Adulf Housing-Defached	334	_	AM Dook	3 74	1 228	Ln(T)=0.86Ln(X)-0.63	38%	62%
;			122	2	אויין כמוע	0.5	0.22,1	78	30	49
52	251	Senior Adult Housing Defached	556	_	AM Deak	371	2 063	Ln(T)=0.86Ln(X)-0.63	38%	62%
			222	2		- ::	2,000	122	46	9/
						TOTALS:	9,064	555	211	344



MASTER TRAFFIC STUDY - PHASE VII TRIP GENERATION **GOLDEN VALLEY RANCH** A.M. PEAK HOUR

esil bue i	đ				Trin Con	Doilly, Triba	7	Peak Hour Trips	r Trips	
Code		Description	Quantity	Units	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
210		Single Family Dwelling Units	489		AM Pask	0.57	4 680	T =0.7(X)+9.43	25%	75%
.			22	3	AIN I CAN	0.0	1,000	352	88	264
710		General Office Building	439.5	X N	AM Deak	11 01	4 830	1.55	88%	12%
	T	P	2:22	2	Aur I Can	0.1.	600'+	681	009	85
710		General Office Building	363.3	X T	AM Deak	11 01	4 000	1.55	%88	12%
:	T		2:200	2	Alvi I call	2:11	1,000	563	496	89
710		General Office Building	415.2	K T	AM Deak	14.04	1 571	1.55	88%	12%
.	T	B	1.2.	2	, and a cean	10:11	- '2','	644	999	77
251		Senior Adulf Housing-Defached	484	2	AM Dook	2 74	1 785	Ln(T)=0.86Ln(X)-0.63	38%	62%
;	寸		2	3	AWI I CON		201,1	108	41	29
251		Senior Adult Housing-Defached	344	2	AM Deak	3 74	1 154	Ln(T)=0.86Ln(X)-0.63	38%	62%
;	T		:	3	AW LOGIN		1, 101	74	28	46
251		Senior Adult Housing-Defached	181	=	AM Dook	371	629	Ln(T)=0.86Ln(X)-0.63	38%	62%
	_	900000	5	3	1 100	-	410	47	18	29
412		County Park	156.5	Acres	AM Deak	2.28	357	0.01	%08	20%
.	T		2	20101	100	2:50	100	2		0
820		Shooping Center	367.0	X T S	AM Deak	42 94	15 761	1.03	61%	39%
	T	S S	2	5	, un ,	15.57	13,101	378	231	147
820		Shopping Center	388.3	KSF	AM Peak	42 94	16 673	1.03	61%	39%
	_		2000		, uni i cont		0.001	400	244	156
						TOTALS:	54,491	3,248	2,312	936
					_	101ALS:	34,491		3,240	



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - OVERALL TRIP GENERATION P.M. PEAK HOUR

Land Use Code	Description	Quantity	Units	Trip Gen. Period	Daily Trips	Peak Hour Trips	Enter	Exit
210	Single Family Dwelling Units	9,341	na	PM Peak	77,919	8,223	5,181	3,043
220	Apartment	1,539	na	PM Peak	17,163	1,440	936	504
232	High Rise Condominiums	10,000	na	PM Peak	41,800	3,462	2,146	1,316
251	Senior Adult Housing-Detached	13,675	ΩO	PM Peak	65,700	4,060	2,477	1,583
412	County Park	74.1	Acres	PM Peak	542	12	6	2
430	Golf Course	276.5	Acres	PM Peak	1,257	64	22	42
520	Elementary School	009	Students	PM Peak	645	140	63	77
522	Middle School	1,200	Students	PM Peak	1,296	120	62	58
530	High School	1,200	Students	PM Peak	2,565	210	66	
710	General Office Building	3,163.2	KSF	PM Peak	34,662	4,691	797	3,893
820	Shopping Center	2,041.9	KSF	PM Peak	88,835	6,934	3,369	3,565
				TOTALS:	332,385	29,355	15,161	14,194



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE I TRIP GENERATION P.M. PEAK HOUR

				T				Peak hour	Trips	
Parcel Number	Land Use Code	Description	Quantity	Units	Trip Gen. Period	Daily Trip Rates	Daily Trips	Average Rate / Regression Equation	Enter	Exit
1	251	Senior Adult Housing-Detached	850	DU	PM Peak	3.71	3,154	Ln(T)=0.72Ln(X)+0.58 230	61% 140	39% 90
2	251	Senior Adult Housing-Detached	815	DŲ	PM Peak	3.71	3,024	Ln(T)=0.72Ln(X)+0.58 223	61% 136	39% 87
3	210	Single Family Dwelling Units	151	DU	PM Peak	9.57	1,445	1.01 153	63% 96	37% 56
4	210	Single Family Dwelling Units	271	DU	PM Peak	9.57	2,593	1.01 274	63% 172	37% 101
5	210	Single Family Dwelling Units	262	DU	PM Peak	9.57	2,507	1.01 265	63% 167	37% 98
7	220	Apartment	1,539	DU	PM Peak	6.72	10,342	T =0.55(X)+17.65 864	65% 562	35% 302
8	210	Single Family Dwelling Units	337	DU	PM Peak	9.57	3,225	1.01 340	63% 214	37% 126
9	210	Single Family Dwelling Units	332	DU	PM Peak	9.57	3,177	1.01 335	63% 211	37% 124
10	210	Single Family Dwelling Units	405	DŲ	PM Peak	9.57	3,876	1.01 409	63% 258	37% 151
11	210	Single Family Dwelling Units	297	DU	PM Peak	9.57	2,842	1.01 300	63%	37%
54	251	Senior Adult Housing-Detached	231	טט	PM Peak	3.71	857	Ln(T)=0.72Ln(X)+0.58 90	189 61%	111 39%
55	251	Senior Adult Housing-Detached	207	DU	PM Peak	3.71	768	Ln(T)=0.72Ln(X)+0.58	55 61%	35 39%
59	251	Senior Adult Housing-Detached	250	DU	PM Peak	3.71	928	83 Ln(T)=0.72Ln(X)+0.58	51 61%	32 39%
60	251	Senior Adult Housing-Detached	416	DU	PM Peak	3.71	1,543	95 Ln(T)=0.72Ln(X)+0.58 137	58 61%	37 39%
61	251	Senior Adult Housing-Detached	263	DU	PM Peak	3.71	976	Ln(T)=0. 72 Ln(X)+0.58	84 61%	54 39%
62	251	Senior Adult Housing-Detached	169	DU	PM Peak	3.71	627	Ln(T)=0.72Ln(X)+0.58 72	60 61% 44	38 39%
	412	County Park	14.0	Acres	PM Peak	2.28	32	0.06	80% 1	28 20% 0
	520	Elementary School	500	Students	PM Peak	1.29	645	0.28 140	45% 63	55% 77
	522	Middle School	800	Students	PM Peak	1.62	1,296	0.15 120	52%	48%
	530	High School	1,500	Students	PM Peak	1.71	2,565	0.14 210	62 47% 99	58 53% 111
	430	Golf Course	249.5	Acres	PM Peak	5.04	1,257	T =0.13(X)+31.30 64	34%	66%
	232	High-Rise Condominiums	2,627	DU	PM Peak	4.18	10,981	T =0.34(X)+15.47	22 62%	42 38%
	820	Shopping Center	265.4	KSF	PM Peak	42.94	11,395	909 3.75	563 48%	345 52%
	<u>i</u>					TOTALS:	70,055	995 6,406	478 3,784	517 2,622

2,475

3,570

TOTALS: 64,025

GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE II TRIP GENERATION P.M. PEAK HOUR

	Trip Gen.	Trip Gen.	_	Daily Tr	ļ	Daily	Peak Hour Trips	ur Trips	
Description Quantity Units Period	Units Period	Period		Rat	es	Trips	Average Rate / Regression Equation	Enter	Exit
210 Single Family Dwelling Units 525 D.I.I PM Paak 9.57	D() PM Paak	PM Peak		9.5	4	5.024	1.01	%89	37%
) - -			3		0,027	530	334	196
210 Single Family Dwelling Units 567 D.11 PM Peak 9.57	DII PM Beak	DM Doak		σ	_	5 426	1.01	63%	37%
				5		2,120	573	361	212
210 Single Family Dwelling Units 279 D.I. PM Beak 9.57	DII PM Beak	PM Poak		0	<u>'</u>	2 670	1.01	63%	37%
				3	_	2,0,0	282	178	104
210 Single Family Dwelling Units 350 D11 PM Peak 9.57	DII PM Peak	DM Peak		0		3 350	1.01	63%	37%
	- M			3	-	0,000	354	223	131
210 Single Family Dwelling Units 393 D11 PM Boak 9.57	DI DM Deak	DM Dask		40		3 761	1.01	63%	37%
				·	5	9,70	397	250	147
210 Single Family Dwelling Units 673 DII PM Peak C	DII DM Deak	DM Deak		0	9 57	6 441	1.01	63%	37%
	2				5.	, ,	680	428	252
210 Single Family Dwelling Holfs 363 D.11 DM Deak	_ _		DM Deak		0.57	2 474	1.01	63%	37%
					5.5	t -t -5	367	231	136
412 County Park 7.0 Acres PM Beak	Acres PM Peak	PM Peak			2 28	, (4)	0.06	%08	20%
	200			3	7.50	2	0	0	0
412 Town Center Park 53.4 Acres DM Deak	Acros		DM Deak		200	100	0.01	80%	20%
	22	-	יוני ו כמוי		7:50	14.4	1	0	0
232 Hinh. Risa Condomini ms 3 061 DII DM Dook	JEOG MG	DM Dook			418	16 557	T =0.34(X)+15.47	62%	38%
	LW LCGN	ו ווו ו כמצ) 	10,01	1362	845	518
Shonning Center Ann Shonning Center Ann Shonning Center	XSE DA Deak	PM Deak		'	42 04	17 185	3.75	48%	52%
		- III			12:21	2,	1501	720	780



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE III TRIP GENERATION P.M. PEAK HOUR

l and Hea				Tain	. H H.	7	Peak hour Trips	Trips	
Code	Description	Quantity	Units	Period	Dainy Imp Rates	Daliy Trips	Average Rate / Regression Equation	Enter	Exit
220	Apartment	1 015	_	DM Dask	6 7 9	6 824	T =0.55(X)+17.65	65%	35%
3		5.0.	3	ו ואו ו כמה	0.72	0,021	576	374	202
251	Senior Adult Housing-Detached	196		деед Ма	3.71	707	Ln(T)=0.72Ln(X)+0.58	61%	39%
	Policiano de la composición dela composición de la composición de la composición de la composición dela composición dela composición dela composición de la composición de la composición de la composición de la composición dela composición del composición dela composición dela composición dela composición dela composición dela composición dela composici	2	3	ו ואו ו כמא		171	80	49	31
251	Senior Adult Housing-Detached	297	<u></u>	DM Deak	3 74	1 100	Ln(T)=0.72Ln(X)+0.58	61%	39%
;		101	3	1 IAI -		1,102	108	99	42
251	Senior Adult Housing-Detached	2,7	=	PM Deak	3 71	2 267	Ln(T)=0.72Ln(X)+0.58	61%	39%
	Policono Billopor Lingo		2	י ואו י		2,201	181	110	7.1
251	Senior Adult Housing-Detached	416	_ 	PM Peak	3 71	1 543	Ln(T)=0.72Ln(X)+0.58	61%	39%
3		2	3	1 M	-	oto,-	137	84	54
251	Senior Adult Housing-Defacted	50.1	Ē	DM Dook	3 71	2 103	Ln(T)=0.72Ln(X)+0.58	61%	39%
[]		3	2	I WI I CON		6 , 130	177	108	69
251	Senior Adult Housing-Detached	425	Ē	DM Deak	271	1 577	Ln(T)=0.72Ln(X)+0.58	61%	39%
		2074	3	180	-		139	85	54
251	Senior Adult Housing-Detached	407	2	DM Deak	271	1 510	Ln(T)=0.72Ln(X)+0.58	61%	39%
		Š	3	I W I CON		5,5	135	82	53
251	Senior Adult Housing-Detached	485	=	DM Dook	3 74	1 700	Ln(T)=0.72Ln(X)+0.58	61%	39%
2		201	2	I WI I CON		66 1,1	153	94	09
251	Senior Adulf Housing-Detached	207	2	PM Dook	3 74	1 102	Ln(T)=0.72Ln(X)+0.58	61%	39%
3		-21	3	INI CON		1,102	108	99	42
412	County Park	7.0	Acroc	DM Dook	3 28	46	0.06	%08	20%
1		?:;	5	I IVI I CON	03:3	2	0	0	0
232	Hinb-Bise Condomini ms	1 365	2	DM Dask	4.18	5 706	T =0.34(X)+15.47	62%	38%
		200.1)	1 m 1 can	2	2,10	480	297	182
820	Shonning Center	137 9	K K	DM Deak	42 94	5 924	3.75	48%	52%
2		5: 15	2	ואוו כמוי	74.07	7,027	517	248	569
					TOTALS:	32,286	2,792	1.663	1.128



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE IV TRIP GENERATION P.M. PEAK HOUR

Code Description Quantity Online Units Period PRAPER Rates Trips Regression Equation Enter 173 Enter 173 Average Rate / 173 Enter 173 Enter 173 Trips Regression Equation Enter 210 Single Family Dwelling Units 274 DU PM Peak 9.57 2.584 1.01 63% 210 Single Family Dwelling Units 264 DU PM Peak 9.57 2,526 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,833 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,843 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 254 DU P	Parcel	Land Use				Trin Con	Doily Trin	L Alica	Peak Hour Trips	ur Trips	
210 Single Family Dwelling Units 274 DU PM Peak 9.57 2,584 1.01 63% 210 Single Family Dwelling Units 244 DU PM Peak 9.57 2,536 1.01 63% 210 Single Family Dwelling Units 284 DU PM Peak 9.57 2,526 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,833 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,841 1.01 63% 210 Single Family Dwelling Units 226 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 210 General Office Building 50.64 KSF <	ber	Code	Description	Quantity	Units	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
210 Single Family Dwelling Units 244 DU PM Peak 9.57 2.335 273 172 158 210 Single Family Dwelling Units 264 DU PM Peak 9.57 2,526 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,626 267 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,833 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,841 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 210 General Office Building 506.4 KSF PM Peak 11.01 6,296 1.49 17% 232 High-Rise Condominiums 2,047 D		210	Single Family Dwelling Units	270	- -	JEOG MG	0.57	2 587	1.01	63%	37%
210 Single Family Dwelling Units 244 DU PM Peak 9.57 2.356 1.01 63% 210 Single Family Dwelling Units 264 DU PM Peak 9.57 2,526 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,881 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,881 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,881 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 710 General Office Building 506.4 KSF PM Peak 11.01 6,296 1.49 17% 710 General Office Building 551.8 KSF <t< td=""><td></td><td></td><td>Simple 6</td><td>217</td><td>3</td><td>יאון כמה</td><td>9.5</td><td>4,304</td><td>273</td><td>172</td><td>101</td></t<>			Simple 6	217	3	יאון כמה	9.5	4,304	273	172	101
210 Single Family Dwelling Units 264 DU PM Peak 9.57 2,526 1.01 63% 210 Single Family Dwelling Units 2.96 DU PM Peak 9.57 2,526 1.01 63% 210 Single Family Dwelling Units 2.96 DU PM Peak 9.57 2,833 1.01 63% 210 Single Family Dwelling Units 2.99 DU PM Peak 9.57 2,861 1.01 63% 210 Single Family Dwelling Units 2.24 DU PM Peak 9.57 2,861 1.01 63% 210 Single Family Dwelling Units 2.24 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 2.24 DU PM Peak 9.57 2,144 1.01 63% 710 General Office Building 571.8 KSF PM Peak 11.01 6,296 1.49 17% 710 General Office Building 571.8 KSF		210	Single Family Dwelling Units	244	2	PM Deak	9.57	235	1.01	63%	37%
210 Single Family Dwelling Units 264 DU PM Peak 9.57 2,526 1,01 63% 210 Single Family Dwelling Units 535 DU PM Peak 9.57 5,120 1,01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,833 1,01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,861 1,01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1,01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1,01 63% 710 General Office Building 506.4 KSF PM Peak 11.01 6,296 145 17% 710 General Office Building 571.8 KSF PM Peak 13.01 1,49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak			6				0.0	2,000	246	155	91
210 Single Family Dwelling Units 535 DU PM Peak 9.57 5,120 267 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,833 1.01 63% 210 Single Family Dwelling Units 299 DU PM Peak 9.57 2,833 1.01 63% 210 Single Family Dwelling Units 299 DU PM Peak 9.57 2,861 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 710 General Office Building 506.4 KSF PM Peak 11.01 6,296 852 149 17% 710 General Office Building 851.9 KSF PM Peak 42.94 13,015 1.49 17% 820 Commercial (Shopping Center)		210	Single Family Dwelling Units	264	nd	PM Peak	9.57	2 526	1.01	63%	37%
210 Single Family Dwelling Units 535 DU PM Peak 9.57 5,120 5,120 540 340 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,833 1.01 63% 210 Single Family Dwelling Units 299 DU PM Peak 9.57 2,861 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,841 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 710 General Office Building 506.4 KSF PM Peak 11.01 6,296 1.49 17% 710 General Office Building 851.9 KSF PM Peak 11.01 6,296 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 8,884 1.03 1.03 110 820 Shopping Center 206	1				}	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	50.50	2,050	267	168	66
210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,833 1.01 63% 210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,861 1.01 63% 210 Single Family Dwelling Units 216 DU PM Peak 9.57 2,861 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 710 General Office Building 506.4 KSF PM Peak 11.01 6,296 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 17% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 1.03 1.49 820 Shopping Center 206.9 KSF PM Peak </td <td></td> <td>210</td> <td>Single Family Dwelling Units</td> <td>535</td> <td>2</td> <td>PM Peak</td> <td>9.57</td> <td>F 120</td> <td>1.01</td> <td>63%</td> <td>37%</td>		210	Single Family Dwelling Units	535	2	PM Peak	9.57	F 120	1.01	63%	37%
210 Single Family Dwelling Units 296 DU PM Peak 9.57 2,833 1.01 63% 210 Single Family Dwelling Units 299 DU PM Peak 9.57 2,861 1.01 63% 210 Single Family Dwelling Units 316 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 11.01 5,575 1.49 1.78 710 General Office Building 571.8 KSF PM Peak 11.01 6,296 1.49 17% 710 General Office Building 571.8 KSF PM Peak 11.01 6,296 1.49 17% 710 General Office Building 851.9 KSF PM Peak 11.01 9,380 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF			8	}	3	1111	2:0	0, 120	540	340	200
210 Single Family Dwelling Units 299 DU PM Peak 9.57 2,954 1.01 63% 210 Single Family Dwelling Units 299 DU PM Peak 9.57 2,144 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 710 General Office Building 506.4 KSF PM Peak 11.01 5,575 1.49 17% 710 General Office Building 571.8 KSF PM Peak 11.01 6,296 852 145 710 General Office Building 571.8 KSF PM Peak 11.01 9,380 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 375 48% 820 Shopping Center 206.9 KSF PM Peak		210	Single Family Dwelling Units	296	2	PM Peak	9.57	2833	1.01	63%	37%
210 Single Family Dwelling Units 299 DU PM Peak 9.57 2,861 1.01 63% 210 Single Family Dwelling Units 316 DU PM Peak 9.57 3,024 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 226 143 710 General Office Building 506.4 KSF PM Peak 11.01 6,296 852 145 710 General Office Building 851.9 KSF PM Peak 11.01 6,296 852 145 710 General Office Building 851.9 KSF PM Peak 11.01 9,380 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 4.18 8,556 T-0.33 61% 820 High-Rise Condominiums 2,047 DU PM Peak 42.94 8,884 771 441 820 Shopping Center 206.9 KSF PM Peak <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>200</td> <td>2,000</td> <td>299</td> <td>188</td> <td>111</td>							200	2,000	299	188	111
210 Single Family Dwelling Units 316 DU PM Peak 9.57 3,024 1,01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1,01 63% 710 General Office Building 506.4 KSF PM Peak 11.01 5,575 14.9 17% 710 General Office Building 571.8 KSF PM Peak 11.01 6,296 14.9 17% 710 General Office Building 851.9 KSF PM Peak 11.01 6,296 14.9 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 4.18 8,556 12.69 16% 820 Shopping Center 2,047 DU PM Peak 4.18 8,556 1.034(X)+15.47 62% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 7,14 441 820 Shopping Center 206.9 KSF PM Peak		210	Single Family Dwelling Units	299		PM Peak	9.57	2 861	1.01	63%	37%
210 Single Family Dwelling Units 316 DU PM Peak 9.57 3,024 1.01 63% 210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 710 General Office Building 506.4 KSF PM Peak 11.01 5,575 1.49 17% 710 General Office Building 851.9 KSF PM Peak 11.01 6,296 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% 820 Shopping Center 206.9 KSF PM Peak			S		2		0.0	7,00,7	302	190	112
210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 710 General Office Building 506.4 KSF PM Peak 11.01 5,575 1.49 17% 710 General Office Building 571.8 KSF PM Peak 11.01 6,296 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 4.18 8,556 1.03 61% 820 Shopping Center 2.047 DU PM Peak 4.18 8,556 7.11 441 820 Shopping Center 2.06.9 KSF PM Peak 4.2.94 13,015 3.75 48% 820 Shopping Center 2.06.9 KSF PM Peak 4.18 8,884 3.75 48% 820 Shopping Center 2.06.9 KSF PM Peak 42.94 8,884 7748 3,050		210	Single Family Dwelling Units	316	2	PM Peak	9.57	3 024	1.01	63%	37%
210 Single Family Dwelling Units 224 DU PM Peak 9.57 2,144 1.01 63% 710 General Office Building 506.4 KSF PM Peak 11.01 5,575 1.49 17% 710 General Office Building 571.8 KSF PM Peak 11.01 6,296 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% 820 Shopping Center 206.9 KSF PM Peak 42.94 13,015 1.03 61% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 37.5 48% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 37.48 3,550			S	2	3	- M	5	7,027	319	201	118
710 General Office Building 506.4 KSF PM Peak 11.01 5,575 1.49 17% 710 General Office Building 571.8 KSF PM Peak 11.01 6,296 1.49 17% 710 General Office Building 851.9 KSF PM Peak 11.01 9,380 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% 232 High-Rise Condominiums 2,047 DU PM Peak 42.94 13,015 1-0.34(X)+15.47 62% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 774 8,050		210	Single Family Dwelling Units	224		PM Peak	9.57	2 144	1.01	63%	37%
710 General Office Building 506.4 KSF PM Peak 11.01 5,575 1.49 17% 710 General Office Building 571.8 KSF PM Peak 11.01 6,296 1.49 17% 710 General Office Building 851.9 KSF PM Peak 11.01 9,380 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% 232 High-Rise Condominiums 2,047 DU PM Peak 4.18 8,556 T=0.34(X)+15.47 62% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 3,75 48% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 3,75 48% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 776 372					3	100	5.5	7, 1	226	143	84
710 General Office Building 571.8 KSF PM Peak 11.01 6,296 755 128 17% 710 General Office Building 851.9 KSF PM Peak 11.01 9,380 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% 232 High-Rise Condominiums 2,047 DU PM Peak 42.94 8,556 T=0.34(X)+15.47 62% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 37.5 48% 776 37.148 3,050		710	General Office Building	506.4	ΚS	PM Peak	11.01	5 575	1.49	17%	83%
710 General Office Building 571.8 KSF PM Peak 11.01 6,296 1.49 17% 710 General Office Building 851.9 KSF PM Peak 11.01 9,380 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 4.18 8,556 T=0.34(X)+15.47 62% 232 High-Rise Condominiums 2,047 DU PM Peak 42.94 8,556 T=0.34(X)+15.47 62% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 3,75 48% 776 3775 776 375 375 375 48%	7		S. T.	1.222	5	IN CON		0,0,0	755	128	626
710 General Office Building 851.9 KSF PM Peak 11.01 9,380 1.49 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% 232 High-Rise Condominiums 2,047 DU PM Peak 4.18 8,556 T=0.34(X)+15.47 62% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% 776 372 776 372 714 372 372 100 776 372 375 375 100 776 372 375 375		710	General Office Building	571.8	KS	PM Deak	11 01	A 296	1.49	17%	83%
710 General Office Building 851.9 KSF PM Peak 11.01 9,380 1.49 17% 17% 820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% 190 232 High-Rise Condominiums 2,047 DU PM Peak 4.18 8,556 T=0.34(X)+15.47 62% 441			6)			- -	0,500	852	145	707
820 Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% 232 High-Rise Condominiums 2,047 DU PM Peak 4.18 8,556 T=0.34(X)+15.47 62% 820 Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% TOTALS: 75,133 7,148 3,050		710	General Office Building	851.9	KSF	PM Peak	11 01	9 380	1.49	17%	83%
Commercial (Shopping Center) 303.1 KSF PM Peak 42.94 13,015 1.03 61% High-Rise Condominiums 2,047 DU PM Peak 4.18 8,556 T=0.34(X)+15.47 62% Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% TOTALS: 75,133 7,148 3,050			8	}			-	200,0	1269	216	1054
High-Rise Condominiums 2,047 DU PM Peak 4.18 8,556 T = 0.34(X)+15.47 62% Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% TOTALS: 75,133 7,148 3,050		820	Commercial (Shopping Center)	303.1	X T	DM Deak	42 94	12015	1.03	61%	39%
High-Rise Condominiums 2,047 DU PM Peak 4.18 8,556 T = 0.34(X)+15.47 62% Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% TOTALS: 75,133 7,148 3,050	1		(Sample 6 - 14 - 15 - 15 - 15 - 15 - 15 - 15 - 15		5	-	7	2.0,5	312	190	122
Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% TOTALS: 75,133 7,148 3,050		232	High-Rise Condominiums	2.047		PM Peak	4 18	8.556	T =0.34(X)+15.47	62%	38%
Shopping Center 206.9 KSF PM Peak 42.94 8,884 3.75 48% TOTALS: 75,133 7,148 3,050))	20010	711	441	270
TOTALS: 75,133 7,148 3,050		820	Shopping Center	206.9	KSF	PM Peak	42 94	8 884	3.75	48%	52%
75,133 7,148 3,050	٦							, 200	776	372	403
							TOTALS:	75,133	7,148	3,050	4,097



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE V TRIP GENERATION P.M. PEAK HOUR

Parcel	and like				Trip Con	7. T.	1	Peak Hour Trips	Trips	
Number	Code	Description	Quantity	Units	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
34	251	Senior Adult Housing-Detached	472	 	PM Deak	2.74	1 751	Ln(T)=0.72Ln(X)+0.58	61%	39%
Water		50.000	-)	1 141 1 0011			150	92	59
35	251	Senior Adult Housing-Defached	519	2	DM Dook	3 71	1 025	Ln(T)=0.72Ln(X)+0.58	61%	39%
		2000	2	2	1 11 1 1		1,350	161	86	63
36	251	Senior Adult Housing-Detached	524	2	PM Dook	3 74	1 0.4.4	Ln(T)=0.72Ln(X)+0.58	61%	39%
				2	- 14		++5,-	162	66	63
37	251	Senior Adult Housing-Defached	253	Ē	DM Dook	274	030	Ln(T)=0.72Ln(X)+0.58	61%	39%
		Politica Science Company	7.00	3	ואון כמה	7.0	505	96	29	37
38	251	Senior Adult Housing-Defached	298		PM Peak	3.71	1 106	Ln(T)=0.72Ln(X)+0.58	61%	39%
				22			20.	108	99	42
						TOTALS: 7,665	7,665	677	413	264



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE VI TRIP GENERATION P.M. PEAK HOUR

Parcei	Parcei Land Use				Trin Gen	Daily Trin	Z Z	Peak Hour Trips	Trips	
Number	Code	Description	Quantity	Units	Period		Trips	Average Rate / Regression Equation	Enter	Exit
47	251	Senior Adult Housing-Detached	555	2	DM Deak	3 7.1	2.050	Ln(T)=0.72Ln(X)+0.58	61%	39%
		Policina Silvania	2	2	ו ואו ו		2,000	169	103	99
48	251	Senior Adult Housing-Detached	475	=	DM Dook	3 74	1 762	Ln(T)=0.72Ln(X)+0.58	61%	39%
		Police Property and Property an	F	3	ואון כמוי		1,702	151	92	59
49	251	Senior Adult Housing-Detached	122		DM Deak	3 74	153	Ln(T)=0.72Ln(X)+0.58	61%	39%
				2	יאון כפון	7:0	2	25	35	22
20	251	Senior Adult Housing-Detached	404	Ē	DM Dook	3 74	1 100	Ln(T)=0.72Ln(X)+0.58	61%	39%
			121	3	ואון כמה		, ±33	134	82	52
51	251	Senior Adult Housing-Detached	334	Ē	DM Deak	3 74	1 22B	Ln(T)=0.72Ln(X)+0.58	61%	39%
		Polonia Billionia Billionia		2	I WI LOOM	7.0	022,1	116	71	45
52	251	Senior Adult Housing-Defached	556	_	PM Peak	3.71	2 063	Ln(T)=0.72Ln(X)+0.58	61%	39%
		6)			2,000	169	103	99
						TOTALS:	9,064	797	486	311



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE VII TRIP GENERATION P.M. PEAK HOUR

		ı			Trip Gen	Daily Trin	Daily	Peak Hour Trips	Trips	
Code Description Quantity	Description	Quantity		Units	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
210 Single Family Dwelling Units 489		489		2	Acad Md	0.57	4 680	1.01	63%	37%
) r		3	ואון כמה	9:01	7,000	494	311	183
710 General Office Building 439 5		439 5		35 <i>X</i>	Acod Ma	14.04	4 830	1.49	17%	83%
		5.		2	ו ויו ו כמה	10.11	4,033	655	111	544
710 General Office Building		363.3		КОП	JEOG MG	44	4 000	1.49	17%	83%
		000	-	2	ו ויו כמה	2.	00°t	541	65	449
710 General Office Building 415.9		4150	-	KOF	DIA Door	14.04	1 574	1.49	17%	83%
		410.1		2	ואון כמה	10.11	4,07.1	619	105	513
251 Senior Adult Housing-Detached 481		481		וום	DM Dook	3.74	1 785	Ln(T)=0.72Ln(X)+0.58	61%	39%
		2		2	ואון כמו		1,700	152	93	59
251 Senior Adult Housing-Detached 311		311		2	DM Deak	3.71	1 151	Ln(T)=0.72Ln(X)+0.58	61%	39%
Policiano Disposicione		-		2	ו זעו ז כמא	0.7	1, 5	111	89	43
251 Senior Adrilf Housing-Detached 181		184		וום	DM Deak	374	673	Ln(T)=0.72Ln(X)+0.58	61%	39%
		5		3	ו ואו ו כפוני		012	52	46	29
412 County Park		15.5 7.5		Acres	DM Deak	2.08	257	90:0	80%	20%
		2.2		2017	100	2:50	òò	6	8	2
820 Shonning Center 387 0		367.0		KSE	DM Dook	42 QA	15 761	3.75	48%	52%
		0.100		2	ואון כפון	75.57	13,101	1376	661	716
820 Shonning Center 388 3		388.3		K T T	DM Dask	42 04	16 673	3.75	48%	25%
		200			- W - CGN	72:37	0,010	1456	669	757
						TOTALS:	54,491	5,490	2,194	3,296



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - OVERALL TRIP GENERATION MIDDAY PEAK HOUR

Land Use Code	Description	Quantity	Units	Trip Gen. Period	Daily Trips	Peak Hour Trips	Enter	Exit
210	Single Family Dwelling Units	9,341	na	Midday Peak Hour	77,919	8,305	5,315	2,990
220	Apartment	1,539	na	Midday Peak Hour	17,163	1,567	926	611
232	High Rise Condominiums	10,000	na	Midday Peak Hour	41,800	3,037	2,065	972
251	Senior Adult Housing-Detached	13,675	na	Midday Peak Hour	65,700	4,343	2,562	1,781
412	County Park	74.1	Acres	Midday Peak Hour	542	109	39	71
430	Golf Course	276.5	Acres	Midday Peak Hour	1,257	26	42	55
520	Elementary School	009	Students	Midday Peak Hour	645	210	116	92
522	Middle School	1,200	Students	Midday Peak Hour	1,296	424	233	191
530	High School	1,200	Students	Midday Peak Hour	2,565	615	424	191
710	General Office Building	3,163.2	KSF	Midday Peak Hour	34,662	4,880	4,294	586
820	Shopping Center	2,041.9	KSF	Midday Peak Hour	88,835	2,131	1,300	831
				TOTALS:	332,385	25,719	17,346	8,372



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE I TRIP GENERATION MIDDAY PEAK HOUR

Г <u>.</u>								Peak hour	Trips	
Parcel Number	Land Use Code	Description	Quantity	Units	Trip Gen. Period	Daily Trip Rates	Daily Trips	Average Rate / Regression Equation	Enter	Exit
1	251	Senior Adult Housing-Detached	850	DŲ	Midday Peak Hour	3.71	3,154	0.35 298	59% 176	41% 122
2	251	Senior Adult Housing-Detached	815	DU	Midday Peak Hour	3.71	3,024	0.35 285	59% 168	41% 117
3	210	Single Family Dwelling Units	151	DŲ	Midday	9.57	1,445	1.02	64%	36%
4	210	Single Family Dwelling Units	271	DU	Peak Hour Midday	9.57	2,593	154 1.02	99 64%	55 36%
5	210	Single Family Dwelling Units	262	DU	Peak Hour Midday	9.57	2,507	276 1.02	177 64%	100 36%
7	220	, ,	1,539	DU	Peak Hour Midday	6.72	10,342	267 T 0.6(X)+17.52	171 61%	96 39%
<u> </u>		Apartment			Peak Hour Midday	-		941 1.02	574 64%	367 36%
8	210	Single Family Dwelling Units	337	DU	Peak Hour Midday	9.57	3,225	344 1.02	220 64%	124 36%
9	210	Single Family Dwelling Units	332	DŲ	Peak Hour	9.57	3,177	339	217	122
10	210	Single Family Dwelling Units	405	DU	Midday Peak Hour	9.57	3,876	1.02 413	64% 264	36% 149
11	210	Single Family Dwelling Units	297	DU	Midday Peak Hour	9.57	2,842	1.02 303	64% 194	36% 109
54	251	Senior Adult Housing-Detached	231	DU	Midday Peak Hour	3.71	857	0.35 81	59% 48	41% 33
55	251	Senior Adult Housing-Detached	207	DU	Midday Peak Hour	3.71	768	0.35 72	59% 43	41% 30
59	251	Senior Adult Housing-Detached	250	DU	Midday Peak Hour	3.71	928	0.35 88	59% 52	41% 36
60	251	Senior Adult Housing-Detached	416	DU	Midday Peak Hour	3.71	1,543	0.35 146	59% 86	41% 60
61	251	Senior Adult Housing-Detached	263	DU	Midday Peak Hour	3.71	976	0.35 92	59% 54	41% 38
62	251	Senior Adult Housing-Detached	169	DU	Midday Peak Hour	3.71	627	0.35 59	59% 35	41% 24
	412	County Park	14.0	Acres	Midday Peak Hour	2.28	32	0.59 8	35% 3	65% 5
	520	Elementary School	500	Students	Midday	1.29	645	0.42	55%	45%
	522	Middle School	800	Students	Peak Hour Midday	1.62	1,296	210 0.53	116 55%	95 45%
	530	High School	1,500	Students	Peak Hour Midday	1.71	2,565	424 0.41	233 69%	191 31%
	430	Golf Course	249.5	Acres	Peak Hour Midday	5.04	1,257	615 0.39	424 43%	191 57%
	232	High-Rise Condominiums	2,627	DU	Peak Hour Midday	4.18	10,981	97 Ln(T)=0.84Ln(X)+0.07	42 68%	55 32%
		-			Peak Hour Midday			799 1.03	544 61%	256 39%
	820	Shopping Center	265.4	KSF	Peak Hour	42.94	11,395	273	167	107
						TOTALS:	70,055	6,585	4,105	2,480

GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE II TRIP GENERATION MIDDAY PEAK HOUR

Parcel	I and Use				Trin Con	Cailly Tails	: 1100	Peak Hour Trips	Trips	
Number	Code	Description	Quantity	Units	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
15	210	Single Family Dwelling Units	525		Midday	9.57	5.004	1.02	64%	36%
			2	3	Peak Hour	5.5	4,04,4	536	343	193
16	210	Single Family Dwelling Units	567	=	Midday	9 57	5 126	1.02	64%	36%
		Simon films to films	3	3	Peak Hour	3.0	0,420	578	370	208
17	210	Single Family Dwelling Units	279	_	Midday	9 57	2 670	1.02	64%	36%
			ì	2	Peak Hour	0.0	2,0,2	285	182	102
18	210	Single Family Dwelling Units	350	2	Midday	9 57	3 350	1.02	64%	36%
!			3	3	Peak Hour	3.37	0,000	357	228	129
19	210	Single Family Dwelling Units	303	<u>-</u>	Midday	9.57	2 764	1.02	64%	36%
			2	55	Peak Hour	0.0		401	257	144
20	210	Single Family Dwelling Units	673	2	Midday	9 57	6 441	1.02	64%	36%
		S)	ì	Peak Hour	5	0, 11	686	439	247
21	210	Single Family Dwelling Units	363	2	Midday	9.57	3 474	1.02	64%	36%
) :		200	3	Peak Hour	0.0	t /t '0	370	237	133
	412	County Park	7.0	Acres	Midday	900	16	0.59	35%	65%
			?		Peak Hour	2:-2	2	4	_	က
	412	Town Center Park	53.4	Acres	Midday	200	122	0.01	%08	20%
			- :	30,	Peak Hour	2.50	77	L	0	0
	232	High-Rise Condominiums	3.961	2	Midday	4 18	16 557	Ln(T)=0.84Ln(X)+0.07	%89	32%
			122/2	3	Peak Hour	2	10,00	1129	767	361
	820	Shopping Center	400.2	KSF	Midday	42 94	17 185	1.03	61%	39%
					Peak Hour	15:51	2011	412	251	161
						TOTALS:	64,025	4,759	3,077	1,681



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE III TRIP GENERATION MIDDAY PEAK HOUR

03	F 1100	L	Peak hour Trips	Trips	
Description Quantify	Units Period Rates	p Dality Trips	Average Rate / Regression Equation	Enter	Exit
Anartment 1 015	PI Midday 6.72	£ 821	T 0.6(X)+17.52	61%	39%
	Peak Hour	0,021	627	382	244
Senior Adult Housing-Defached	100	707	0.35	29%	41%
	Peak Hour	121	69	40	28
Senior Adult Housing-Detached		1 100	0.35	29%	41%
	Peak Hour	1,102	104	61	43
Senior Adult Housing-Detached	<u></u>	796.6	0.35	29%	41%
	Peak Hour	4,40	214	126	88
Senior Adult Housing-Detached	- -	1 5/3	0.35	29%	41%
	Peak Hour	0,0	146	98	09
Senior Adult Housing-Detached 501	Dil Midday 3 74	2 103	0.35	29%	41%
	Peak Hour	2,133	207	122	85
Senior Adulf Housing-Detached 425	Midday 3.71	1 577	0.35	29%	41%
	Peak Hour		149	88	61
Senior Adult Housing-Defacted		1 540	0.35	29%	41%
	Peak Hour	0.0,	142	84	28
Senior Adult Housing-Detached	A85 DII Midday 3 71	1 799	0.35	29%	41%
	Peak Hour	1,133	170	100	20
Senior Adult Housing-Detached		1 102	0.35	29%	41%
	Peak Hour	1,102	104	61	43
County Park	Acres Midday 2.28	7	0.59	35%	65%
	Peak Hour	2	4	1	3
High-Bise Condominiums 1 365		5 70E	Ln(T)=0.84Ln(X)+0.07	%89	32%
-	Peak Hour	3,100	461	314	148
Shonning Center	Midday	5 924	1.03	61%	39%
	X T T	100		0.7	99



985

TOTALS: 32,286

GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE IV TRIP GENERATION MIDDAY PEAK HOUR



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE V TRIP GENERATION MIDDAY PEAK HOUR

Parcel	Parcel and lea				Trin Con	Triby T	1 71:50	Peak Hour Trips	ır Trips	
Number	Code	Description	Quantity	Units	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
34	251	Serior Adult Housing	647	<u>ا</u>	Midday	2.74	1 754	0.35	29%	41%
;			716	2	Peak Hour		 	165	97	88
35	251	Senior Adult Housing-Detached	510	110	Midday	274	4 005	0.35	29%	41%
3		Solid Addit I Sasing Potabled	0.0	2	Peak Hour		676,1	182	107	74
36	251	Senior Adult Housing-Detached	527	1	Midday	2.74	20.0	0.35	29%	41%
3		Como radicionalia Dotavilor	757	20	Peak Hour	1.7	t t	183	108	75
37	251	Senior Adult Housing-Detached	253	2	Midday	3.74	020	0.35	29%	41%
5)	Como Caura Iodania Dotacia	200	2	Peak Hour		000	68	52	36
38	251	Senior Adult Housing-Defached	298	<u>_</u>	Midday	374	1 106	0.35	29%	41%
;			200	2	Peak Hour		, 100	104	62	43
						TOTALS: 7,665	7,665	723	427	296



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE VI TRIP GENERATION MIDDAY PEAK HOUR

Number	l and l lea					Trip.	1111	Peak Hour Trips	ar Trips	
	Code	Description	Quantity	Units	Period	Dality I rip Rates	Dally	Average Rate / Regression Equation	Enter	Exit
47	251	Senior Adult Housing-Detached	555	110	Midday	3 74	2.050	0.35	29%	41%
:	;		88	2	Peak Hour		2,003	194	115	80
48	251	Senior Adult Housing-Detached	475	2	Midday	3 71	1 762	0.35	29%	41%
			-	2	Peak Hour	-	301,	166	86	89
49	251	Senior Adulf Housing-Detached	122		Midday	3 71	153	0.35	29%	41%
2			7	2	Peak Hour		2	43	25	18
20	251	Senior Adult Housing-Detached	404	Ē	Midday	3 74	1 100	0.35	29%	41%
}			5	2	Peak Hour	1	664,1	141	83	58
5,	251	Senior Adult Housing-Detached	334	Ē	Midday	3.74	1 22B	0.35	29%	41%
;		Complete Com	3	2	Peak Hour		7220	116	88	47
52	251	Senior Adult Housing-Detached	556	2	Midday	3.74	2 063	0.35	29%	41%
				2	Peak Hour	-	2,000	195	115	80
						TOTALS:	9,064	855	504	351



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE VII TRIP GENERATION MIDDAY PEAK HOUR

Parcel	l and like				Trin Con	Doily, Tain	1.1.00	AM	5	
Number		Description	Quantity	Units	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
9	210	Single Family Dwelling Units	489		Midday	0.57	4 680	1.02	64%	36%
,	ì		Pr	3	Peak Hour	9.0	4,000	499	319	180
12	710	General Office Building	439.5	KS TS	Midday	11 01	028 /	1.55	%88	12%
			2.00	2	Peak Hour	5:1	600.F	681	009	82
13	710	General Office Building	363.3	KSH	Midday	11.01	UUU V	1.55	%88	12%
	:		2000	2	Peak Hour	0	1,000	563	496	89
14	710	General Office Building	415.2	KSF	Midday	11 01	1 571	1.55	%88	12%
			10:5	2	Peak Hour	10.11	1,0,1	644	266	11
56	251	Senior Adult Housing-Detached	484	Ē	Midday	3 74	1 795	0.35	29%	41%
}			2	3	Peak Hour		20,1	168	66	69
57	251	Sepior Adult Housing-Detached	344	2	Midday	3 74	1 151	0.35	29%	41%
5				3	Peak Hour		t ?	109	64	45
28	251	Senior Adult Housing-Defached	181	2	Midday	374	673	0.35	29%	41%
			2	3	Peak Hour	- 1:0	210	63	37	56
	412	County Park	156 T	Δoroe	Midday	300	257	0.59	35%	%59
	1	county) and	2.00.	805	Peak Hour	7:50	100	92	32	09
	820	Shonning Center	367.0	KSF	Midday	10 01	15 761	1.03	61%	%6E
		Single Si	2:122	2	Peak Hour	12.27	0, 0	378	231	147
	820	Shonning Center	388.3	KSF	Midday	42 94	16 673	1.03	61%	36%
			2000		Peak Hour	12:21	0,0,0	400	244	156
						TOTALS:	54,491	3,598	2,688	606



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - OVERALL TRIP GENERATION SATURDAY PEAK HOUR

Land Use Code	Description	Quantity	Units	Trip Gen. Period	Daily Trips	Peak Hour Trips	Enter	Exit
210	Single Family Dwelling Units	9,341	na	Satruday Peak Hour	82,234	7,498	4,049	3,449
220	Apartment	1,539	na	Satruday Peak Hour	16,320	1,328	664	664
232	High Rise Condominiums	10,000	na	Satruday Peak Hour	42,142	3,324	828	2,496
251	Senior Adult Housing-Detached	13,675	na	Satruday Peak Hour	55,126	3,350	1,608	1,742
412	County Park	74.1	Acres	Satruday Peak Hour	2,362	414	744	170
430	Golf Course	276.5	Acres	Satruday Peak Hour	1,452	160	83	<i>LL</i>
520	Elementary School	009	Students	Satruday Peak Hour	0	0	0	0
522	Middle School	1,200	Students	Satruday Peak Hour	0	0	0	0
530	High School	1,200	Students	Satruday Peak Hour	915	165	106	29
710	General Office Building	3,163.2	KSF	Satruday Peak Hour	7,461	1,291	269	594
820	Shopping Center	2,041.9	KSF	Satruday Peak Hour	101,249	880'6	4,754	4,334
				TOTALS:	309,260	26,617	13,032	13,585



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE I TRIP GENERATION SATURDAY PEAK HOUR

	l		T	1			<u> </u>	Peak hou	ur Trips	
Parcel Number	Land Use Code	Description	Quantity	Units	Trip Gen. Period	Daily Trip Rates	Daily Trips	Average Rate / Regression Equation	Enter	Exit
1	251	Senior Adult Housing-Detached	850	DU	Saturday Peak Hour	2.77	2,355	0.27 230	48% 110	52% 119
2	251	Senior Adult Housing-Detached	815	DU	Saturday Peak Hour	2.77	2,258	0.27 220	48% 106	52% 114
3	210	Single Family Dwelling Units	151	DU	Saturday Peak Hour	10.1	1,525	T =0.89(X)+10.93	54% 78	46% 67
4	210	Single Family Dwelling Units	271	DU	Saturday Peak Hour	10.1	2,737	T =0.89(X)+10.93 252	54% 136	46% 116
5	210	Single Family Dwelling Units	262	DU	Saturday Peak Hour	10.1	2,646	T =0.89(X)+10.93	54% 132	46% 112
7	220	Apartment	1,539	DU	Saturday Peak Hour	6.39	9,834	0.52 800	50% 400	50% 400
8	210	Single Family Dwelling Units	337	טם	Saturday Peak Hour	10.1	3,404	T =0.89(X)+10.93	54% 168	46% 143
9	210	Single Family Dwelling Units	332	DŲ	Saturday Peak Hour	10.1	3,353	T =0.89(X)+10.93	54% 165	46% 141
10	210	Single Family Dwelling Units	405	DU	Saturday Peak Hour	10.1	4,091	T =0.89(X)+10.93	54% 201	46% 171
11	210	Single Family Dwelling Units	297	DU	Saturday Peak Hour	10.1	3,000	T =0.89(X)+10.93	54% 149	46% 127
54	251	Senior Adult Housing-Detached	231	DU	Saturday Peak Hour	2.77	640	0.27 62	48%	52% 32
55	251	Senior Adult Housing-Detached	207	DU	Saturday Peak Hour	2.77	573	0.27 56	48% 27	52% 29
59	251	Senior Adult Housing-Detached	250	DU	Saturday Peak Hour	2.77	693	0.27 68	48% 32	52% 35
60	251	Senior Adult Housing-Detached	416	DU	Saturday Peak Hour	2.77	1,152	0.27 112	48% 54	52% 58
61	251	Senior Adult Housing-Detached	263	DU	Saturday Peak Hour	2.77	729	0.27 71	48% 34	52% 37
62	251	Senior Adult Housing-Detached	169	DU	Saturday Peak Hour	2.77	468	0.27 46	48% 22	52% 24
	412	County Park	14.0	Acres	Saturday Peak Hour	12.14	170	2.24 31	59% 19	41% 13
	520	Elementary School	500	Students	Saturday Peak Hour	0	0	0	0%	0%
	522	Middle School	800	Students	Saturday Peak Hour	0	0	0	0% 0	0%
	530	High School	1,500	Students	Saturday Peak Hour	0.61	915	0.11 165	64% 106	36% 59
	430	Golf Course	249.5	Acres	Saturday Peak Hour	5.82	1,452	0.64 160	52% 83	48% 77
	232	High-Rise Condominiums	2,627	DU	Saturday Peak Hour	4.31	11,322	T =0.30(X)+28.85	43% 351	57% 466
	820	Shopping Center	265.4	KSF	Saturday Peak Hour	49.97	13,260	4.97 1319	52%	48%
					FOR FIUUI	TOTALS:	66,576	1319 6,062	686 3,088	633 2,974

2,855

6,232

TOTALS: 68,577

GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE II TRIP GENERATION SATURDAY PEAK HOUR

Parrel	l and lies				Trip	Doilly Tain	, is a	Peak Hour Trips	ur Trips	
Number	Code	Description	Quantity	Units	Period	Dally Inp Rates	Dality Trips	Average Rate / Regression Equation	Enter	Exit
15	210	Single Family Dwelling Units	525	IIG	Saturday	40.4	5 202	T =0.89(X)+10.93	54%	46%
?)		250	2	Peak Hour		2,300	478	258	220
16	210	Single Family Dwelling Units	567	110	Saturday	101	5 707	T =0.89(X)+10.93	54%	46%
?])			2	Peak Hour		7,12,	516	278	237
17	210	Single Family Dwelling Units	270	2	Saturday	101	2818	T =0.89(X)+10.93	54%	46%
:]	2		212	3	Peak Hour		2,010	259	140	119
6	210	Single Family Dwelling Units	350	2	Saturday	10.1	3636	T =0.89(X)+10.93	54%	46%
2) 		200	3	Peak Hour		0,000	322	174	148
19	210	Single Family Dwelling Units	303	2	Saturday	101	090 8	T =0.89(X)+10.93	24%	46%
·]	2			2	Peak Hour		0,00	361	195	166
20	210	Single Family Dwelling Hints	673		Saturday	101	2029	T =0.89(X)+10.93	54%	46%
}	2.1		200	2	Peak Hour		0,737	610	329	281
2	210	Single Family Dwelling Units	363	2	Saturday	404	999 8	T =0.89(X)+10.93	54%	46%
	21-2		200	ב ב	Peak Hour	1.01	2,000	334	180	154
	412	County Park	7.0	Acree	Saturday	1214	78	2.24	29%	41%
	!		2:-	500	Peak Hour	15:17	20	16	6	9
	412	Town Center Park	524	Arrae	Saturday	866	661	0.01	%08	20%
				5000	Peak Hour	2.50	771	1	0	0
	232	High-Rise Condominims	3 061	2	Saturday	811	16 557	0.34	19%	81%
	202		0,00	2	Peak Hour	÷	10,001	1347	256	1091
	820	Shopping Center	4002	Υ. Σ	Saturday	49 97	10 008	4.97	92%	48%
	250	Supplied Supplied	T00:E	2	Peak Hour	10:01	000,01	1989	1034	955



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE III TRIP GENERATION SATURDAY PEAK HOUR

	1 1 1 1 1				Ü	:		Peak hour Trips	ur Trips	
Parcel Number	Land Use Code	Description	Quantity	Units	i rip Gen. Period	Dally Lrip Rates	Dally Trips	Average Rate / Regression Equation	Enter	Exit
22	066	to confere &	1 015	-	Saturday	06.9	3013	0.52	20%	%09
SS	777	Aparunem	0,1	2	Peak Hour	6.39	0,400	528	264	264
30	251	Sonior Adult Housing Datached	106	-	Saturday	277	5/13	0.27	48%	52%
60	167	Selliol Addit nodsilig-Detactied	08	2	Peak Hour	7.7.7	2	53	25	28
70	251	Senior Adult Housing-Defected	700	1	Saturday	277	803	0.27	48%	25%
P F	107	Selliol Addit Hodsling-Detactied	727	2	Peak Hour	7.7.7	020	80	38	42
41	251	Senior Adult Housing Defacted	611	וום	Saturday	277	1 600	0.27	48%	25%
F	- 53	Selliol Addit Hodeling-Detached	-	2	Peak Hour	7.7.7	260,1	165	26	98
77	251	Senior Adult Housing Detached	778		Saturday	277	1 150	0.27	48%	25%
74	- 23	Sellioi Addit i jodali 18-Detaciled	2	2	Peak Hour	7 7	1,102	112	54	58
13	251	Conjor Adult Lougist Description	203	-	Saturday	77.6	1 637	0.27	48%	25%
?	107	Selliol Addit nodsliig-Detaciled	160	2	Peak Hour	7.7.7	1,00,1	160	1.1	83
//	251	Sector Adult Housian Detacted	105	110	Saturday	277	1177	0.27	48%	52%
t t	103	ספווסו אמנורו וסמפונוק-חפומכוופת	440	2	Peak Hour	7.7.7	1,11,	115	55	90
71	264	Contact Adult House	707		Saturday	22.6	1 197	0.27	48%	25%
5	107	Selliol Addit nousitig-Detactied	5	2	Peak Hour	7 7.7	1,121	110	53	25
31	254	South the principle of the principle	707	- 10	Saturday	27.6	1 2/2	0.27	48%	25%
?	707	Sellor Addit Hodsling-Delacifed	ç	3	Peak Hour	7.7.7	545,	131	63	89
53	254	Socior Adult Lougist	707	-	Saturday	277	823	0.27	48%	52%
3	107	Selliol Addit Hodeling-Detached	167	3	Peak Hour	7 :: 7	620	80	38	42
	410	7200 340000	7.0	Acros	Saturday	10.11	85	2.24	29%	41%
	714	County Fain	7.0	ACIES	Peak Hour	12.14	60	16	6	9
	232	Lich Dies Condominiums	1 265	IIG	Saturday	118	5 70G	0.34	19%	81%
	707		000,1	3	Peak Hour	÷	20,7,0	464	88	376
	820	Shopping Confor	137.0	35 <i>X</i>	Saturday	20 07	5 803	4.97	25%	48%
	020	Shopping center	101.3	100	Peak Hour	16.61	0,000	686	357	329
						TOTALS:	29,488	2,699	1,201	1,498



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE IV TRIP GENERATION SATURDAY PEAK HOUR

Dorool	l ond Ho				1		:	Peak Hour Trips	ur Trips	
Number	Code	Description	Quantity	Units	Period	Dally I rip Rates	Dally Trips	Average Rate / Regression Equation	Enter	Exit
22	210	Single Family Dwelling Units	270	nα	Saturday	10.1	2,727	T =0.89(X)+10.93	54%	46%
					reak mour			167	၁၃၁	QL.I.
23	210	Single Family Dwelling Units	244	na	Saturday	10.1	2 464	T =0.89(X)+10.93	24%	46%
				}	Peak Hour	:		228	123	105
24	210	Single Family Dwelling Units	264	2	Saturday	101	2 666	T =0.89(X)+10.93	54%	46%
i				2	Peak Hour		2,000	246	133	113
25	210	Single Family Dwelling Units	535		Saturday	707	2 404	T =0.89(X)+10.93	54%	46%
	2		200	2	Peak Hour		tot'o	487	263	224
26	210	Single Family Dwelling Units	296	2	Saturday	10.4	000 6	T =0.89(X)+10.93	54%	46%
2) - 		202	3	Peak Hour		2,990	274	148	126
27	210	Single Family Dwelling Units	200	=	Saturday	10.1	3.020	T =0.89(X)+10.93	24%	46%
i	2		202	3	Peak Hour		0,020	277	150	127
28	210	Single Family Dwelling Units	316	2	Saturday	101	3 100	T =0.89(X)+10.93	54%	46%
	2		272	3	Peak Hour		0,13%	292	158	134
29	210	Single Family Dwelling Units	224	=	Saturday	101	2 262	T =0.89(X)+10.93	24%	46%
ì				3	Peak Hour		202,2	210	114	97
30	710	General Office Building	506.4	K K K	Saturday	2 37	1 200	0.41	24%	46%
3) - -		<u> </u>	2	Peak Hour	2.01	7,200	208	112	96
33	710	General Office Building	571.8	H.S.H	Saturday	2 3 7	1 255	0.41	24%	46%
;)		2:-	2	Peak Hour	10:3	2001	234	127	108
32	710	General Office Building	851.0	HS.X	Saturday	237	2010	0.41	54%	46%
})		2.1.20	2	Peak Hour	10.5	2,013	349	189	161
	820	Commercial (Shonning Center)	303.1	KSF	Saturday	42 94	13.015	1.03	61%	39%
	2	(puipo Binddono) moralino	-:200	2	Peak Hour	15.21	5,0	312	190	122
	232	High-Rise Condominiums	2 047	=	Saturday	4 18	מצצ	0.34	19%	81%
			7,0,1	3	Peak Hour	2	0,00	969	132	564
	820	Shopping Center	206.9	Υ. Υ.	Saturday	49 97	10 338	4.97	52%	48%
)		2000	5	Peak Hour		20012	1028	535	494
						TOTALS:	61,209	5,094	2,508	2,585



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GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE V TRIP GENERATION SATURDAY PEAK HOUR

Darrel	Parcel and lea				17.1	h : :: :		Peak Hour Trips	r Trips	
Number	Code	Description	Quantity	Units	Period	Dally Inp Rates	Dally	Average Rate / Regression Equation	Enter	Exit
34	251	Senior Adult Housing-Detached	472	- 10	Saturday	277	1 207	0.27	48%	52%
;			717	2	Peak Hour	7 1.7	700,1	127	61	99
35	251	Senior Adult Housing-Detached	510	I	Saturday	77.6	1 / 20	0.27	48%	52%
			2	20	Peak Hour	7.7.7	5,	140	29	73
36	251	Senior Adiult Housing-Detached	P65	- 12	Saturday	2.77	1 151	0.27	48%	52%
3		Policia de la composição de la composiçã	7-70	2	Peak Hour	7.7.7	- - -	141	89	74
37	251	Senior Adult Housing-Detached	253	2	Saturday	77.6	707	0.27	48%	52%
;)		200	2	Peak Hour	7.7.	2	89	33	36
38	251	Senior Adult Housing-Defached	298		Saturday	77.6	ROE	0.27	48%	52%
				2	Peak Hour	, , . ,	020	80	39	42
						TOTALS:	5,723	558	268	290

GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE VI TRIP GENERATION SATURDAY PEAK HOUR

Description Quantity Units Impoent Period Rates Trips Average Rate / Regression Equation Senior Adult Housing-Detached 475 DU Saturday Saturday Senior Adult Housing-Detached 2.77 1,316 0.27 Senior Adult Housing-Detached 404 DU Saturday Saturday 2.77 1,119 0.27 Senior Adult Housing-Detached 404 DU Saturday Saturday 2.77 1,119 0.27 Senior Adult Housing-Detached 331 DU Saturday Saturday 2.77 1,149 0.27 Senior Adult Housing-Detached 556 DU Saturday Saturday 2.77 1,540 0.27 Senior Adult Housing-Detached 556 DU Peak Hour Peak Hour 2.77 1,540 0.27	Parce	Parcel I and I lea				Trin Con	Doily Trin	, die	Peak Hour Trips	ır Trips	
251 Senior Adult Housing-Detached 555 DU Saturday Peak Hour Saturday 2.77 1,537 0.27 150 251 Senior Adult Housing-Detached 475 DU Saturday Peak Hour Saturday 2.77 1,316 0.27 251 Senior Adult Housing-Detached 404 DU Saturday Peak Hour Saturday 2.77 1,119 0.27 251 Senior Adult Housing-Detached 331 DU Saturday Peak Hour Saturday 2.77 1,119 0.27 251 Senior Adult Housing-Detached 356 DU Saturday Peak Hour Saturday 2.77 1,540 0.27 251 Senior Adult Housing-Detached 556 DU Saturday Peak Hour Saturday 2.77 1,540 0.27 251 Senior Adult Housing-Detached 556 DU Peak Hour Peak Hour Saturday 2.77 1,540 0.27	Number	. Code		Quantity	Units	Period	Rates	Trips	Average Rate / Regression Equation	Enter	Exit
251 Senior Adult Housing-Detached 475 DU Saturday 2.77 1,316 150 251 Senior Adult Housing-Detached 122 DU Saturday 2.77 338 0.27 251 Senior Adult Housing-Detached 404 DU Saturday 2.77 1,119 0.27 251 Senior Adult Housing-Detached 331 DU Saturday 2.77 1,149 0.27 251 Senior Adult Housing-Detached 356 DU Saturday 2.77 1,540 0.27 251 Senior Adult Housing-Detached 556 DU Saturday 2.77 1,540 0.27 251 Senior Adult Housing-Detached 556 DU Saturday 2.77 1,540 0.27 251 Senior Adult Housing-Detached 556 DU Saturday 2.77 1,540 0.27	47	251	Sepior Adult Housing-Detached	5,55		Saturday	277	1 527	0.27	48%	52%
251 Senior Adult Housing-Detached 475 DU Saturday Peak Hour 2.77 1,316 0.27 128 251 Senior Adult Housing-Detached 404 DU Peak Hour Saturday 2.77 1,119 0.27 251 Senior Adult Housing-Detached 331 DU Saturday Saturday 2.77 1,119 0.27 251 Senior Adult Housing-Detached 331 DU Saturday Saturday 2.77 1,540 0.27 251 Senior Adult Housing-Detached 556 DU Saturday Peak Hour Saturday 2.77 1,540 0.27 251 Senior Adult Housing-Detached 556 DU Peak Hour Peak Hour Saturday 2.77 1,540 0.27	:	:	Polico Pierre Polico	3	3	Peak Hour	7.1.7	100,1	150	72	78
251 Senior Adult Housing-Detached 122 DU Saturday 2.77 338 0.27 138 0.27 33 251 Senior Adult Housing-Detached 404 DU Saturday 2.77 1,119 0.27 109 109 251 Senior Adult Housing-Detached 331 DU Saturday 2.77 1,540 0.27 89 251 Senior Adult Housing-Detached 556 DU Saturday 2.77 1,540 0.27 150 251 Senior Adult Housing-Detached 556 DU Peak Hour 2.77 1,540 0.27 150 251 Senior Adult Housing-Detached 556 DU Peak Hour 2.77 1,540 150	48	251	Senior Adult Housing-Detached	475	2	Saturday	277	1 216	0.27	48%	52%
251 Senior Adult Housing-Detached 122 DU Saturday Peak Hour Saturday 2.77 338 0.27 251 Senior Adult Housing-Detached 404 DU Saturday Peak Hour Saturday 2.77 1,119 0.27 251 Senior Adult Housing-Detached 331 DU Saturday Saturday Saturday 2.77 1,540 0.27 251 Senior Adult Housing-Detached 556 DU Saturday Saturday Saturday Saturday 2.77 1,540 0.27 251 Senior Adult Housing-Detached 556 DU Peak Hour Saturday Sat	2	}		2	3	Peak Hour	7:17	0,0,0	128	62	29
251 Senior Adult Housing-Detached 404 DU Saturday Saturday Saturday 2.77 1,119 0.27 109 251 Senior Adult Housing-Detached 331 DU Saturday Saturday Saturday 2.77 1,540 0.27 251 Senior Adult Housing-Detached 556 DU Saturday Saturday Saturday 2.77 1,540 0.27 TOTALS: 6,767 660	49	251	Senior Adult Housing-Detached	122	ī	Saturday	277	338	0.27	48%	52%
251 Senior Adult Housing-Detached 404 DU Saturday Peak Hour Saturday 2.77 1,119 0.27 109 251 Senior Adult Housing-Detached 331 DU Saturday Saturday Saturday 2.77 917 89 251 Senior Adult Housing-Detached 556 DU Saturday Peak Hour Saturday 2.77 1,540 0.27 TOTALS: 6,767 660 60	2	}		12.5	3	Peak Hour	7.7.7	O C C	33	16	17
251 Senior Adult Housing-Detached 331 DU Saturday 2.77 917 917 89 89 89 150 Saturday 2.77 91,540 1.540 1.50 150 150 150 150 150 150 150 150 150 1	50	251	Senior Adult Housing-Detached	404	Ē	Saturday	277	1 110	0.27	48%	52%
251 Senior Adult Housing-Detached 331 DU Saturday Peak Hour 2.77 917 89 251 Senior Adult Housing-Detached 556 DU Saturday Saturday Peak Hour 2.77 1,540 0.27 TOTALS: 6,767 660 660 660 660 660	}		Composition of the Composition o	5	3	Peak Hour	7.7.7	611,1	109	52	57
251 Senior Adult Housing-Detached 556 DU Peak Hour Peak	5.7	251	Sepior Adult Housing-Detached	334	Ē	Saturday	277	017	0.27	48%	52%
251 Senior Adult Housing-Detached 556 DU Saturday Peak Hour Hour 2.77 1,540 0.27 150 TOTALS: 6,767 660	5			5	2	Peak Hour	7:17	5	68	43	46
TOTALS: 6,767 660	22	251	Senior Adult Housing-Detached	556	_	Saturday	277	1 540	0.27	48%	52%
6,767 660				2	3	Peak Hour	7	oto;	150	72	78
							TOTALS:	6,767	099	317	343



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - PHASE VII TRIP GENERATION SATURDAY PEAK HOUR

Darrol	I and Hea				Tail P	Della Tala	i	Peak Hour Trips	ur Trips	
Number		Description	Quantity	Units	Period	Dally I rip Rates	Trips	Average Rate / Regression Equation	Enter	Exit
9	210	Single Family Dwelling I linis	489	110	Saturday	10.1	4 030	T =0.89(X)+10.93	54%	46%
				3	Peak Hour		4,500	446	241	205
12	710	General Office Building	439.5	KS R	Saturday	25.6	4 042	0.41	54%	46%
!)		100.0	2	Peak Hour	70.7	4,0,1	180	26	83
6	710	General Office Building	६ ६५६	В	Saturday	75.6	964	0.41	54%	46%
2)		2:500	5	Peak Hour	70.7	00	149	80	69
14	710	General Office Building	415.2	KOE	Saturday	286	700	0.41	54%	46%
-)		1.0.2	2	Peak Hour	7:31	† 20 20 20 20 20 20 20 20 20 20 20 20 20	170	92	78
56	251	Senior Adult Housing-Detached	481		Saturday	77.6	1 220	0.27	48%	52%
}			2	2	Peak Hour	5 ' '	1,002	130	62	99
22	251	Senior Adult Housing-Detached	311	=	Saturday	277	961	0.27	48%	52%
;			, , , , , , , , , , , , , , , ,	3	Peak Hour	2.11	001	84	40	44
228	251	Senior Adult Housing-Detached	181	Ιία	Saturday	27.6	504	0.27	48%	52%
3	ì		2	3	Peak Hour	5 .17	301	49	23	25
	412	County Park	156 E	Acres	Saturday	12.17	1 000	2.24	29%	41%
	!	county) and	2:00:	200	Peak Hour	14:14	1,300	351	207	144
	820	Shonping Center	367.0	KSF	Saturday	40 07	18 3/1	4.97	25%	48%
	2-2			2	Peak Hour	10:01	10,041	1824	949	876
	820	Shonping Center	388.3	KS.	Saturday	49.07	19 402	4.97	25%	48%
			200.0	2	Peak Hour	10:01	10,702	1930	1003	926
						TOTALS:	50,165	5,313	2,796	2,517



Stanley Consultants INC.

TRIP DISTRIBUTION FOR NON RESIDENTIAL LAND USES - A.M. PEAK HOUR MASTER TRAFFIC STUDY **GOLDEN VALLEY RANCH**

Phase ↓	Land Use →	Parks	Schools	Golf Course Commercial	Commercial	Office	Trips by
	Total Trips	0	1,249	48	273	0	1,570
Phase I	Primary trips	0	0	12	191	1	203
	Secondary trips	0	1,249	36	82	1	1,367
	Total Trips	1	0	0	412	0	413
Phase II	Primary trips	0		ı	305		305
	Secondary trips	П			107	1	108
	Total Trips	0	0	0	142	0	142
Phase III	Primary trips	-	•	•	92	•	92
	Secondary trips	1	1	r	95		50
	Total Trips	0	0	0	525	2,992	3,517
Phase IV	Primary trips	•	•	ı	394	1,496	1,890
	Secondary trips	-		1	131	1,496	1,627
	Total Trips	0	0	0	0	0	0
Phase V	Primary trips	ı	i.	1	-	-	0
	Secondary trips	•	ŝ	-	-	-	0
	Total Trips	0	0	0	0	0	0
Phase VI	Primary trips	-	-	_	-	-	0
	Secondary trips	-	-	-	-	-	0
	Total Trips	2	0	0	778	1,888	2,668
Phase VII	Primary trips	0	-	_ =	607	944	1,551
	Secondary trips	2	-	_	171	944	1,117
Total	Primary trips	0	0	12	1,589	2,440	4,041
otai	Secondary trips	3	1,249	36	541	2,440	4,269

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TRIP DISTRIBUTION FOR NON RESIDENTIAL LAND USES - P.M. PEAK HOUR GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY

																						urgan Milli	
Trips by Phase	1,530	713	818	1,502	I,III	391	217	336	181	3,964	2,254	I,710	0	0	0	0	0	0	4,656	3,116	1,540	7,530	4,639
Office	0	5	E	0	•	1	0	-		2,876	1,438	1,438	0	Î	1	0	•	•	1,815	806	806	2,346	2,346
Golf Course Commercial	266	269	667	1,501	1,111	068	213	988	181	1,088	918	272	0	-	-	0	-	-	2,832	2,209	623	5,168	1,765
Golf Course	64	16	48	0	-	-	0	-	-	0	7	-	0	-	-	0	-	-	0	_	_	16	48
Schools	470	0	470	0	_	-	0	-	_	0	-	-	0	-	-	0	-	•	0	-	-	0	470
Parks	1	0	1	1	0	1	0	-	-	0	-	-	0	-	-	0	ŧ	•	6	0	6	0	11
Land Use→	Total Trips	Primary trips	Secondary trips	Total Trips	Primary trips	Secondary trips	Total Trips	Primary trips	Secondary trips	Total Trips	Primary trips	Secondary trips	Total Trips	Primary trips	Secondary trips	Total Trips	Primary trips	Secondary trips	Total Trips	Primary trips	Secondary trips	Primary trips	Secondary trips
Phase ↓		Phase I			Phase II			Phase III			Phase IV			Phase V			Phase VI			Phase VII			I Otal

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TRIP DISTRIBUTION FOR NON RESIDENTIAL LAND USES - MIDDAY PEAK HOUR **GOLDEN VALLEY RANCH** MASTER TRAFFIC STUDY

Schools Golf Course Commercial 1,249 97 273 0 24 191
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1,249

TRIP DISTRIBUTION FOR NON RESIDENTIAL LAND USES - SATURDAY PEAK HOUR MASTER TRAFFIC STUDY **GOLDEN VALLEY RANCH**

Phase ↓	Land Use →	Parks	Schools	Golf Course	Golf Course Commercial	Office	Trips by Phase
	Total Trips	31	165	160	1,319	0	1,675
Phase I	Primary trips	0	0	40	923	-	696
	Secondary trips	31	165	120	396	-	712
	Total Trips	16	0	0	1,989	0	2,005
Phase II	Primary trips	0	-	-	1,472	•	1,472
	Secondary trips	16	-	1	517	ŧ	533
	Total Trips	16	0	0	989	0	702
Phase III	Primary trips		-	•	446		446
	Secondary trips	1	_	-	240	_	240
	Total Trips	0	0	0	1,340	791	2,131
Phase IV	Primary trips	-	-	-	1,005	396	I,40I
	Secondary trips	-	-	-	335	396	731
	Total Trips	0	0	0	0	0	0
Phase V	Primary trips	-	-	1	-	•	0
	Secondary trips	-	_	*	-	-	0
	Total Trips	0	0	0	0	0	0
Phase VI	Primary trips	1	-	-	-	•	0
	Secondary trips	-	-	-	-	•	0
	Total Trips	351	0	0	3,754	499	4,604
Phase VII	Primary trips	0	-	_	2,928	250	3,178
	Secondary trips	351	-	_	826	250	1,426
Total	Primary trips	0	0	40	6,774	645	7,459
ıOtai	Secondary trips	398	165	120	2,314	645	3,642



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY - INTERNAL CAPTURE CALCULATION P.M. PEAK HOUR

Analyst: Kondala Rao Mantri
Date: May 10, 2006

Name of Development: Golden Valley Ranch Time Period: PM Peak Hour

Exit to External Enter from External 2,999 2,999 ITE Code 820 - Shopping Center Size 2042 KSF LAND USE C 535 905 Balanced Total % 3,369 3,565 6,934 895 29 10% 23% Enter Exit Total 3% Balanced 107 Demand Demand 4,438 12% 069 247 303 428 Demand 31% Balanced Balanced 252 LAND USE A 303 710 - Office 3163 KSF Demand Demand 3,416 3,329 31% otal 4,690 79 Demand TE Code Size Balanced 78 Enter 7% Total 215 Exit 2% Externa 6,143 Enter from External Exit to External 069 Internal 303 809 506 LAND USE B 2% 34,555 Units Demand Residential Balanced 0 % Total 10,740 6,446 ITE Code___ Size__ %0 Enter Exit 10,234 Enter from External Exit to External 6,143

				Internal Capture	_ % [
	Total	13,923	12,921	26,844	28,810
velopment	Land Use C	2,999	3,030	6,029	6,934
Net External Trips for Multi use Development	Land Use B	10,234	6,143	16,377	17,186
t External Trips	Land Use A	069	3,748	4,438	4,690
Ne		Enter	Exit	Total	Single-Use Trip Gen. Est.



Stanley Consultants №

MASTER TRAFFIC STUDY - ONSITE AND OFFSITE TRAFFIC IN EACH PHASE **GOLDEN VALLEY RANCH**

24,716	4,639	20,077	Total Volumes:	Tota			
3,949	1,540	2,410	1,540	3,116	833	PM Peak Hour	7
797	0	797	0	0	797	PM Peak Hour	9
677	0	677	0	0	677	PM Peak Hour	5
5,438	1,710	3,728	1,710	2,254	3,184	PM Peak Hour	4
2,610	181	2,429	181	336	2,274	PM Peak Hour	က
5,655	391	5,263	391	1,111	4,544	PM Peak Hour	2
5,590	818	4,772	818	713	4,877	PM Peak Hour	1
Hour Traffic	Traffic	Traffic	Secondary (Onsite)	Primary (Offsite)	Trips	Peak Hour	Phase
Total Dook	Vest Offsite Desire	Total Offsita	Non Residential Trips	Non Resid	Recidential		

22,793	3,642	19,151	Total Volumes:	Tota			
3,887	1,426	2,460	1,426	3,178	709	SAT Peak Hour	7
099	0	660	0	0	660	SAT Peak Hour	9
558	0	558	0	0	558	SAT Peak Hour	5
4,363	731	3,632	731	1,401	2,962	SAT Peak Hour	4
2,351	240	2,111	240	446	1,905	SAT Peak Hour	က
5,699	533	5,166	533	1,472	4,227	SAT Peak Hour	2
5,276	712	4,565	712	963	4,313	SAT Peak Hour	- -
Hour Traffic	Traffic	Traffic	Secondary (Onsite)	Primary (Offsite)	Trips	Peak Hour	Phase
Jood letoT	100 ctoT etisaO etoT etisHO etoT	ofis#O letoT	Non Residential Trips	Non Resid	Residential		

GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY INTERNAL DISTRIBUTION OF TRAFFIC

		Phase II	Phase III	2015 Peak	2015 ADT	Phase IV	Phase V	Phase VI	Phase VII	2025 Peak	2025 ADT
Roadway	(Peak Hour Volumes)	(Peak Hour Volumes)	(Peak Hour Volumes)	Hour Volumes	Volumes	(Peak Hour Volumes)	(Peak Hour Volumes)	(Peak Hour Volumes)	(Peak Hour Volumes)	Hour Volumes	Volumes
East Loop Road (Section 1)	1,500	0	0	1,500	16,667		0	99	0	1,550	17,222
East Loop Road (Section 2)	1,000	1,500	0	2,500	27,778	250	0	92	0	2,800	31,111
East Loop Road (Section 3)	0	200	0	200	955'5	1,500	0	50	0	2,050	22,778
West Loop Road (Section 1)	750	0	0	750	8,333	0	0	50	0	800	8,889
West Loop Road (Section 2)	500	0	0	500	5,556	0	0	95	0	550	6,111
West Loop Road (Section 3)	0	0	1,500	1,500	16,667	0	0	95	0	1,550	17,222
Aztec Road Extension	1,000	1,000	500	2,500	27,778	250	100	0	005	3,350	37,222
Aztec Road (South of Roundabout)	1,000	1,000	500	2,500	27,778	250	100	0	200	3,350	37,222
Mobile Road Extension	1,000	0	0	1,000	11,111	0	0	0	200	1,500	16,667
Hualapai Drive Extension	500	0	250	750	8,333	0	0	400	0	1,150	12,778
Cerbat Road Extension	0	0	500	500	5,556	0	0	400	0	006	10,000
Ramada Road Extension	0	0	1,000	1,000	11,111	0	100	0	0	1,100	12,222
Indian Wells Road Extension	0	0	500	200	5,556	0	007	0	0	002	7,778
Sacramento Road Extension	500	1,000	1,000	2,500	27,778	0	250	0	0	2,750	30,556
Centennial Road Extension	0	200	0	500	5,556	2,000	0	0	0	2,500	27,778
Tampico Road Extension	0	0	0	0	0	2,000	0	0	0	2,000	22,222
TC Connecter	200	2,000	0	2,200	24,444	0	0	0	0	2,200	24,444
Bacobi Road Extension	1,500	1,500	0	3,000	33,333	250	0	0	100	3,350	37,222
East Middle Road	0	250	0	250	2,778	200	0	0	0	750	8,333

East Loop Road

Section 1 - Between Roundabout and Bacobi Road Extension Section 2 - Between Bacobi Road Extension and Centennial Road Section 3 - Between Centennial Road and Sacramento Road

Section 1 - Between Roundabout and Mobile Road Extension Section 2 - Between Mobile Road Extension and Ramada Road Section 3 - Between Centennial Road and Sacramento Road

West Loop Road



GOLDEN VALLEY RANCH MASTER TRAFFIC STUDY BACKGROUND TRAFFIC VOLUMES

Roadway	Direction	Location	2003 Volumes (ADT)	2015 Projected Volumes (ADT)	2025 Projected Volumes (ADT)	2040 Projected Volumes (ADT)
Highway 68	E-W	Between Verde Rd & US 93	11,700	21,012	34,226	71,152
Colorado Road	N-S	2010' south of Highway 68	969	1,070	1,743	3,625
Aztec Road	N-S	0.1 mile south of Highway 68	877	1,575	2,565	5,333
Aztec Road	N-S	0.1 mile north of Shinarump Road	513	921	1,501	3,120
Bacobi Road	N-S	1 mile north of Shinarump Drive	211	379	617	1,283
Shinarump Road	E-W	480' west of Aztec Road	106	190	310	645
Shinarump Road	E-W	1660' north of Oatman Road	753	1,352	2,203	4,579
Aquarius Drive	E-W		1	1,352	2,203	4,579
Sacramento Road	N-S		1	1,575	2,565	5,333
Centennial Road	N-S		1	1,575	2,565	5,333
Ramada Road	N-S		t	1,575	2,565	5,333



Appendix B

Results from the HCS Analyses

2015 Results

HCS Arterial Planning Results - 2015 P.M. Peak Hour

Exterior Roadways

Aquarius Drive

	PLANNT	NG ANALYSI	rs		
Analyst:	Kondala Rao M				
Agency/Co.:	Stanley Consu		nc		
Date Performed:	5/9/2006	,			
Analysis Time Period:	P.M. Peak Hou	r			
Urban Street:	Aquarius Driv				
Direction of Travel:	Aquarras Driv	C			
Jurisdiction:	Moharro Country	. 7.77			
	Mohave County	, A4			
Analysis Year:	2015	Damah Man	ton Markela Ottodo		
Project ID:	Gorden varrey	Ranch Mas	ster Traffic Study		
Traffic Characteristics					
Annual average daily t	raffic, AADT	25000	vpd		
Planning analysis hour		0.090	-		
Directional distributi		0.500			
Peak-hour factor, PHF	•	0.900			
Adjusted saturation fl	ow rate	1800	pcphgpl		
Percent turns from exc		50	*		
rereeme earns from exe	rabive raneb	50			
	Roadway Cha	racteristi	ics		
Number of through lane	s one directio	n, N 2			
Free flow speed, FFS		40	mph		
Urban class		2	~		
Section length		4.60) miles		
Median		No			
Left-turn bays		Yes			
	Signal Char	acteristic	CS		
Signalized intersectio	ns	2			
Arrival type, AT		3			
Signal type (k = 0.5 f	or planning)	Actuated			
Cycle length, C	o- p-0,	90.0	sec		
Effective green ratio,	a/c	0.600			
Bilective green facto,	9/ 0	0.000			
Results					
Annual average daily t	raffic, AADT	25000	vpd		
Two-way hourly volume	•	2250	vph		
Hourly directional vol	ume	1125	vph		
Through-volume 15-min.		625	v		
Running time	220 2000	414.0			
v/c ratio		0.30	sec		
Through capacity		2050	vph		
Progression factor, PF		1.000	v pri		
-			202		
Uniform delay	to-a T	8.8	sec		
Filtering/metering fac	tor, 1	0.962			
Incremental delay		0.4	sec ,		
Control delay		9.2	sec/v		
Total travel speed, Sa		38.3	mph		
Total urban street LOS		A			

Aztec Road

PLANN	IING ANALYSI	:S				
Analyst: Kondala Rao	Mantri					
Agency/Co.: Stanley Cons	ultants, In	nc.				
Date Performed: 5/9/2006	·					
Analysis Time Period: P.M. Peak Ho	our					
Urban Street: Aztec Road						
Direction of Travel:						
urisdiction: Mohave County, AZ						
4.						
Analysis Year: 2015 Project ID: Golden Valley Ranch Master Traffic Study						
rioject ib: Golden valley kanch Ma	racer irairi	c actuay				
Traffic Characteristics						
		-				
Annual average daily traffic, AADT	43000	vpd				
Planning analysis hour factor, K	0.090					
Directional distribution factor, D	0.500	·				
Peak-hour factor, PHF	0.900					
Adjusted saturation flow rate	1800	pcphgpl				
Percent turns from exclusive lanes	50	8				
Roadway Ch	aracteristi	.cs				
Number of through lanes one directi						
Free flow speed, FFS	45	mph				
Urban class	2					
Section length	4.40) miles				
Median	Yes					
Left-turn bays	Yes					
	Yes	es				
	Yes	es				
	Yes	es				
Signal Cha	Yes racteristic	es				
Signal Cha	Yes racteristic 2	es				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning)	Yes racteristic 2 3	sec				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C	Yes racteristic 2 3 Actuated					
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning)	Yes racteristic 2 3 Actuated 90.0					
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C	Yes racteristic 2 3 Actuated 90.0					
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res	Yes cracteristic 2 3 Actuated 90.0 0.600	sec				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT	Yes cracteristic 2 3 Actuated 90.0 0.600 cults 43000	sec				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume	Yes cracteristic 2 3 Actuated 90.0 0.600 cults 43000 3870	sec vpd vph				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume	Yes cracteristic 2 3 Actuated 90.0 0.600 cults 43000 3870 1935	sec vpd vph vph				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate	Yes aracteristic 2 3 Actuated 90.0 0.600 sults 43000 3870 1935 1075	vpd vph vph vph v				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time	Yes aracteristic 2 3 Actuated 90.0 0.600 sults 43000 3870 1935 1075 352.0	sec vpd vph vph				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio	Yes aracteristic 2 3 Actuated 90.0 0.600 bults 43000 3870 1935 1075 352.0 0.33	vpd vph vph vph v				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity	Yes aracteristic 2 3 Actuated 90.0 0.600 sults 43000 3870 1935 1075 352.0 0.33 3240	vpd vph vph vph v				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF	Yes aracteristic 2 3 Actuated 90.0 0.600 sults 43000 3870 1935 1075 352.0 0.33 3240 1.000	vpd vph vph vph v sec vph				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay	Yes aracteristic 2 3 Actuated 90.0 0.600 bults 43000 3870 1935 1075 352.0 0.33 3240 1.000 9.0	vpd vph vph vph v				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I	Yes aracteristic 2 3 Actuated 90.0 0.600 sults 43000 3870 1935 1075 352.0 0.33 3240 1.000 9.0 0.953	vpd vph vph vph v sec vph				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay	Yes aracteristic 2 3 Actuated 90.0 0.600 sults 43000 3870 1935 1075 352.0 0.33 3240 1.000 9.0 0.953 0.3	vpd vph vph v sec vph sec vph				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay Control delay	Yes aracteristic 2 3 Actuated 90.0 0.600 sults 43000 3870 1935 1075 352.0 0.33 3240 1.000 9.0 0.953 0.3 9.3	vpd vph vph v sec vph sec vph sec				
Signal Characteristics Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay Control delay Total travel speed, Sa	Yes aracteristic 2 3 Actuated 90.0 0.600 sults 43000 3870 1935 1075 352.0 0.33 3240 1.000 9.0 0.953 0.3	vpd vph vph v sec vph sec vph				
Signal Characteristics Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay Control delay	Yes aracteristic 2 3 Actuated 90.0 0.600 sults 43000 3870 1935 1075 352.0 0.33 3240 1.000 9.0 0.953 0.3 9.3	vpd vph vph v sec vph sec vph sec				

Bacobi Road

PLA	NNING ANALYS:	rs			
Analyst: Kondala Ra	o Mantri				
Agency/Co.: Stanley Co	nsultants, I	nc			
Date Performed: 5/9/2006					
Analysis Time Period: P.M. Peak	Hour				
Urban Street: Bacobi Roa	d				
Direction of Travel:					
Jurisdiction: Mohave Cou	nty, AZ				
Analysis Year: 2015					
Project ID: Golden Valley Ranch Master Traffic Study					
Traffic Characteristics					
			_		
Annual average daily traffic, AAD	T 37000	vpd			
Planning analysis hour factor, K	0.090				
Directional distribution factor,	D 0.500				
Peak-hour factor, PHF	0.900				
Adjusted saturation flow rate	1800	pcphgpl			
Percent turns from exclusive lane	ຣ 50	8			
Roadway	Characterist:	ics			
Number of through lanes one direc	tion, N 2				
Free flow speed, FFS	45	mph			
Urban class	2				
Section length	4.40) miles			
Median	Yes				
Left-turn bays	Yes				
-		cs			
-	Yes haracteristic	cs			
-		cs			
Signal C Signalized intersections Arrival type, AT	haracteristio 2 3	cs			
Signal C	haracteristio 2 3	cs			
Signal C Signalized intersections Arrival type, AT	haracteristio 2 3	cssec			
Signal C Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning	haracteristic 2 3) Actuated				
Signal C Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning Cycle length, C Effective green ratio, g/C	haracteristic 2 3) Actuated 90.0				
Signal Constraints Signal Constraints Signal type, AT Signal type (k = 0.5 for planning Cycle length, Constraints Signal type (k = 0.5 for planning Cycle length, Constraints Signal type (k = 0.5 for planning Cycle length, Constraints Signal	haracteristic 2 3) Actuated 90.0 0.600 esults				
Signal C Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning Cycle length, C Effective green ratio, g/C	haracteristic 2 3) Actuated 90.0 0.600 esults				
Signal Constraints Signal Constraints Signal type, AT Signal type (k = 0.5 for planning Cycle length, Constraints Signal type (k = 0.5 for planning Cycle length, Constraints Signal type (k = 0.5 for planning Cycle length, Constraints Signal	haracteristic 2 3) Actuated 90.0 0.600 esults	sec			
Signal Constraints Signal Constraints Signal type, AT Signal type (k = 0.5 for planning Cycle length, Constraints Signal type (respective green ratio, g/Constraints Signal type (k = 0.5 for planning Cycle length, Constraints Signal Constrain	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000	sec			
Signal Constructions Arrival type, AT Signal type (k = 0.5 for planning Cycle length, C Effective green ratio, g/C Annual average daily traffic, AAD Two-way hourly volume	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330	sec vpd vph			
Signal Constructions Arrival type, AT Signal type (k = 0.5 for planning Cycle length, Constructions are ratio, g/Constructions ar	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330 1665	vpd vph vph			
Signal Constructions Arrival type, AT Signal type (k = 0.5 for planning Cycle length, Constructions are ratio, g/Constructions ar	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330 1665 925	vpd vph vph vph v			
Signal Constructions Arrival type, AT Signal type (k = 0.5 for planning Cycle length, Constructions are ratio, g/Constructions ar	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330 1665 925 352.0	vpd vph vph vph v			
Signal Constraints Signal Constraints Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning Cycle length, Constraints Signal type (k = 0.5 for planning Cycle length, Constraints Signal type (k = 0.5 for planning Cycle length, Constraints, Grand Signal type (k = 0.5 for planning time v/c ratio) Signal Constraints	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330 1665 925 352.0 0.43	vpd vph vph vph v			
Signal Constructions Arrival type, AT Signal type (k = 0.5 for planning Cycle length, Constructions and Cycle length, Constructions are signal type (k = 0.5 for planning Cycle length, Constructions are signal type (k = 0.5 for planning Cycle length, Construction and Cycle length, Construction are are signal type (k = 0.5 for planning Cycle length, Construction and Cycle length,	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330 1665 925 352.0 0.43 2160	vpd vph vph v sec vph			
Signal Constructions Arrival type, AT Signal type (k = 0.5 for planning Cycle length, Constructions) Effective green ratio, g/Constructions Annual average daily traffic, AAD Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330 1665 925 352.0 0.43 2160 1.000 9.7	vpd vph vph vph v			
Signal Constructions Arrival type, AT Signal type (k = 0.5 for planning Cycle length, Constructions) Effective green ratio, g/Constructions Annual average daily traffic, AAD Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330 1665 925 352.0 0.43 2160 1.000 9.7 0.906	vpd vph vph v sec vph			
Signal Constructions Arrival type, AT Signal type (k = 0.5 for planning Cycle length, Constructions) Effective green ratio, g/Constructions Annual average daily traffic, AAD Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330 1665 925 352.0 0.43 2160 1.000 9.7 0.906 0.6	vpd vph vph vph v sec vph sec			
Signal Constraints Signal Constraints Signal type, AT Signal type (k = 0.5 for planning Cycle length, Constraints Signal type (k = 0.5 for planning Cycle length, Constraints Signal type (k = 0.5 for planning Cycle length, Constraints Signal type (k = 0.5 for planning Cycle length, Control delay Signal type, AT Signal type, AT Signal type, AT Signal type, AT Signal Constraints Signal Constra	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330 1665 925 352.0 0.43 2160 1.000 9.7 0.906 0.6 10.3	vpd vph vph vph v sec vph sec sec/v			
Signal Constructions Arrival type, AT Signal type (k = 0.5 for planning Cycle length, Constructions) Effective green ratio, g/Constructions Annual average daily traffic, AAD Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay	haracteristic 2 3) Actuated 90.0 0.600 esults T 37000 3330 1665 925 352.0 0.43 2160 1.000 9.7 0.906 0.6	vpd vph vph vph v sec vph sec			

Colorado Road

	PLANNI	NG ANALYS	IS		
Analyst: Kondal	a Rao M	Mantri			
Agency/Co.: Stanle	y Consu	ltants, In	nc		
Date Performed: 5/9/20	06				
Analysis Time Period: P.M. Pe	eak Hou	ır			
Urban Street: Colora					
Direction of Travel:		-			
Jurisdiction: Mohave	County	, 1A.7.			
Analysis Year: 2015	courrey	, 112			
Project ID: Golden Valley Ranch Master Traffic Study					
rioject is. dorden variey Rai	iicii Mac	cer mari	ic beau	·Y	
Traffic Characteristics					
77			-		
Annual average daily traffic,		19000	abg		
Planning analysis hour factor		0.090			
Directional distribution factor	or, D	0.500			
Peak-hour factor, PHF		0.900			
Adjusted saturation flow rate		1800	pcphg	pl	
Percent turns from exclusive	lanes	50	용		
Poads	wax Cha	racteristi	ice		
	_				
Number of through lanes one di	irectio	-			
Free flow speed, FFS		45		mph	
Urban class		2			
Section length		4.60)	miles	
Median		Yes			
Left-turn bays		Yes			
Signa	al Char	acteristic	cs		
~			-		
Signalized intersections		2			
Arrival type, AT		3			
Signal type (k = 0.5 for plans	ning)	Actuated			
Cycle length, C	J.	90.0	sec		
Effective green ratio, g/C		0.600			
,,,,,,,,,					
Results					
Annual accessed daile busefile	7 7 DH	10000			
Annual average daily traffic,	AADT	19000	vpd		
Two-way hourly volume		1710	vph		
Hourly directional volume		855	vph		
Through-volume 15-min. flow ra	ate	475	v		
Running time		368.0	sec		
v/c ratio		0.22			
Through capacity		2160	vph		
Progression factor, PF		1.000			
Uniform delay		8.3	sec		
			sec		
Uniform delay		8.3	sec sec		
Uniform delay Filtering/metering factor, I Incremental delay Control delay		8.3 0.984			
Uniform delay Filtering/metering factor, I Incremental delay Control delay		8.3 0.984 0.2	sec .		
Uniform delay Filtering/metering factor, I Incremental delay		8.3 0.984 0.2 8.5	sec sec/v		

Sacramento Road

	PLANNI	ING ANALYS	IS		
Analyst:	Condala Rao N	Mantri			
-	Stanley Consu	ıltants, I	nc		
	5/9/2006				
	M. Peak Hou				
	Sacramento Ro	oad			
Direction of Travel: Jurisdiction:	Joharra Countr	• 7.17			
	Nohave County	/, A4			
Analysis Year: 2015 Project ID: Golden Valley Ranch Master Traffic Study					
Traffic Characteristics					
Annual average daily tra	ffic, AADT	17000	vpd		
Planning analysis hour f		0.090			
Directional distribution	factor, D	0.500			
Peak-hour factor, PHF		0.900		_	
Adjusted saturation flow		1800	bcbpd	pl	
Percent turns from exclu	isive lanes	50	કે		
	_Roadway Cha	racterist:	ics		
Number of through lanes one direction, N 2					
Free flow speed, FFS		40		mph	
Urban class		2		-	
Section length		5.00	0	miles	
Median		Yes			
Left-turn bays		Yes			
	_Signal Char	racteristic	cs		
Q4		_			
Signalized intersections	v	2 3			
Arrival type, AT Signal type (k = 0.5 for	nlanning)	3 Actuated			
Cycle length, C	praining,	90.0	sec		
Effective green ratio, g	/C	0.600	DCC		
<u> </u>	-				
Results					
Annual average daily tra	ffic, AADT	17000	vpd		
Two-way hourly volume		1530	vph		
Hourly directional volum	e	765	vph		
Through-volume 15-min. f	low rate	425	v		
Running time		450.0	sec		
v/c ratio		0.20			
Through capacity		2160	vph		
Progression factor, PF		1.000			
Uniform delay		8.2	sec		
Filtering/metering facto	Τ, 1	0.988			
Incremental delay Control delay		0.2 g 4	sec/v		
Total travel speed, Sa		8.4 38.6	mph		
Total urban street LOS		Э0.0 А	mbu		
		- -			

Shinarump Drive

PLANN	IING ANALYSI	rs			
Analyst: Kondala Rao	Mantri				
Agency/Co.: Stanley Cons	ultants, Ir	nc			
Date Performed: 5/9/2006					
Analysis Time Period: P.M. Peak Ho	our				
Urban Street: Shinarump Dr	rive				
Direction of Travel:					
Jurisdiction: Mohave Count	y, AZ				
Analysis Year: 2015					
Project ID: Golden Valley Ranch Ma	ster Traffi	ic Study			
Traffic Characteristics					
2					
Annual average daily traffic, AADT	25000	vpd			
Planning analysis hour factor, K	0.090				
Directional distribution factor, D	0.500				
Peak-hour factor, PHF	0.900				
Adjusted saturation flow rate Percent turns from exclusive lanes	1800	pcphgpl			
referre turns from exclusive lanes	50	*			
Roadway Ch	aracteristi	.cs			
Number of through lanes one directi	on, N 3				
Free flow speed, FFS	45	mph			
Urban class	2	11021			
Section length	5.00) miles			
Median	Yes				
Left-turn bays	Yes				
Signal Cha	racteristic	ne.			
	racteristi(, s			
Signalized intersections	2				
Arrival type, AT	3				
Signal type $(k = 0.5 \text{ for planning})$	Actuated				
Cycle length, C	90.0	sec			
Effective green ratio, g/C	0.600				
Results					
		_			
Annual average daily traffic, AADT	25000	vpd			
Two-way hourly volume	2250	vph			
Hourly directional volume	1125	vph			
Through-volume 15-min. flow rate	625	v			
Running time	400.0	sec			
v/c ratio	0.19	-1.			
Through capacity	3240	vph			
Progression factor, PF	1.000	505			
Uniform delay	8.1	sec			
Filtering/metering factor, I	0.989				
Incremental delay	0.1	sec			
Control delay	8.3	sec/v			
Total travel speed, Sa	43.2	mph			
Total urban street LOS	Α				

Tombstone Trail

PLANN	ING ANALYSI	:S				
Analyst: Kondala Rao		· · · · · · · · · · · · · · · · · · ·				
Agency/Co.: Stanley Cons		nc .				
Date Performed: 5/9/2006		1-				
Analysis Time Period: P.M. Peak Ho	ur					
Urban Street: Tombstone Tr						
Direction of Travel:						
Jurisdiction: Mohave Count	v. A7					
Analysis Year: 2015	7,					
Project ID: Golden Valley Ranch Master Traffic Study						
Traffic Characteristics						
Annual average daily traffic, AADT	7000	vpd				
Planning analysis hour factor, K	0.090	vpa				
Directional distribution factor, D	0.500					
Peak-hour factor, PHF	0.900					
Adjusted saturation flow rate	1800	pcphgpl				
Percent turns from exclusive lanes	50	* hebudhi				
Percent turns from exclusive lanes	50	76				
Roadway Ch	aracteristi	.Cs				
Number of Ebrouch lance and disposed	on N 2					
Number of through lanes one direction		la				
Free flow speed, FFS	40	mph				
Urban class	2					
Section length	8.00) miles				
Median	Yes					
Left-turn bays	Yes					
Signal Cha	racteristic	:s				
Signalized intersections	2					
	3					
Arrival type, AT	_					
Signal type (k = 0.5 for planning) Cycle length, C	Actuated 90.0	909				
Effective green ratio, g/C	0.600	sec				
Blicceive green facto, g/c	0.000					
Res	ults					
Annual average daily traffic, AADT	7000	vpd				
Two-way hourly volume	630	vph				
Hourly directional volume	315	vph				
Through-volume 15-min. flow rate	175	v pii				
Running time	720.0					
v/c ratio		sec				
Through capacity	0.08 2160	vph				
Progression factor, PF	1.000	v pii				
Uniform delay	7.6	sec				
Filtering/metering factor, I	0.999	per				
Incremental delay	0.999	EAG.				
-		sec				
Control delay	7.6	Sec/v				
Total urban street LOS	39.2	mph				
Total urban street LOS	A					

Interior Roadways

Aztec Road Extension

	PLANNI	NG ANALYS	S			
Analyst:	Kondala Rao M					
Agency/Co.:	Stanley Consu	ıltants, Ir	ıc			
Date Performed:	5/9/2006	•				
Analysis Time Period:	P.M. Peak Hou	ır				
Urban Street:	Aztec Road Ex					
Direction of Travel:						
Jurisdiction:	Mohave County	z. AZ				
Analysis Year:	2015	,				
Analysis Year: 2015 Project ID: Golden Valley Ranch Master Traffic Study						
,	Project ID: Golden valley kanch Master Trairic Study					
	Traffic C	haracteris	tics			
Annual average daily t	raffic, AADT	30000	vpd			
Planning analysis hour	•	0.090	-			
Directional distributi		0.500				
Peak-hour factor, PHF	•	0.900				
Adjusted saturation fl	ow rate	1800	pcphgpl			
Percent turns from exc		50	8			
	Roadway Cha	racteristi	.cs			
Number of through lane	s one directio	on, N 3				
Free flow speed, FFS		45	mph			
Urban class		2	<u></u>			
Section length		2.30	miles			
Median		Yes				
Left-turn bays Yes						
hert-curn bays	gioval glass	Yes				
	Signal Char		:s			
Signalized intersectio			rs			
		acteristic	's			
Signalized intersection	ns	acteristic	's			
Signalized intersection	ns	racteristic 2 3	sec			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f	ns or planning)	racteristic 2 3 Actuated				
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C	ns or planning) g/C	2 3 Actuated 90.0 0.600				
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C	ns or planning)	2 3 Actuated 90.0 0.600				
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C	ns or planning) g/CResu	2 3 Actuated 90.0 0.600				
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume	ns or planning) g/CResu raffic, AADT	2 3 Actuated 90.0 0.600	sec			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t	ns or planning) g/CResu raffic, AADT	2 3 Actuated 90.0 0.600	sec			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume	ns or planning) g/CResu raffic, AADT	acteristic 2 3 Actuated 90.0 0.600 1ts 30000 2700	sec vpd vph			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume Hourly directional vol	ns or planning) g/CResu raffic, AADT	2 3 Actuated 90.0 0.600 0.500 11ts 30000 2700 1350	sec vpd vph vph			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume Hourly directional vol Through-volume 15-min. Running time v/c ratio	ns or planning) g/CResu raffic, AADT	2 3 Actuated 90.0 0.600 1lts 30000 2700 1350 750	sec vpd vph vph vph v			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume Hourly directional vol Through-volume 15-min. Running time	ns or planning) g/CResu raffic, AADT	2 3 Actuated 90.0 0.600 11ts 30000 2700 1350 750 184.0	sec vpd vph vph vph v			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume Hourly directional vol Through-volume 15-min. Running time v/c ratio	ns or planning) g/C Resuraffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 11ts 30000 2700 1350 750 184.0 0.23	vpd vph vph v			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume Hourly directional vol Through-volume 15-min. Running time v/c ratio Through capacity	ns or planning) g/C Resuraffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 1lts 30000 2700 1350 750 184.0 0.23 3240	vpd vph vph v			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume Hourly directional vol Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF	ns or planning) g/CResu raffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 11ts 30000 2700 1350 750 184.0 0.23 3240 1.000	vpd vph vph v sec vph			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume Hourly directional vol Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF Uniform delay	ns or planning) g/CResu raffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 11ts 30000 2700 1350 750 184.0 0.23 3240 1.000 8.4	vpd vph vph v sec vph			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume Hourly directional vol Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering fac	ns or planning) g/CResu raffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 1lts 30000 2700 1350 750 184.0 0.23 3240 1.000 8.4 0.982	vpd vph vph v sec vph sec			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume Hourly directional vol Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering fact Incremental delay	ns or planning) g/C Resuraffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 1lts 30000 2700 1350 750 184.0 0.23 3240 1.000 8.4 0.982 0.2	vpd vph vph v sec vph sec			
Signalized intersection Arrival type, AT Signal type (k = 0.5 f Cycle length, C Effective green ratio, Annual average daily t Two-way hourly volume Hourly directional vol Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering fact Incremental delay Control delay	ns or planning) g/C Resuraffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 1ts 30000 2700 1350 750 184.0 0.23 3240 1.000 8.4 0.982 0.2 8.5	vpd vph vph v sec vph sec sec sec/v			

Bacobi Road Extension

	PLANNING A	NALYSIS					
Analyst: Konda	la Rao Mantr						
Agency/Co.: Stanl	ey Consultan	ts, Inc					
Date Performed: 5/9/2	006						
Analysis Time Period: P.M.	Peak Hour						
Urban Street: Bacob	i Road Exten	sion					
Direction of Travel:							
Jurisdiction: Mohav	e County, AZ						
Analysis Year: 2015	• .						
Project ID: Golden Valley R	Project ID: Golden Valley Ranch Master Traffic Study						
Traffic Characteristics							
Annual average daily traffic	, AADT 350	00 vpđ					
Planning analysis hour facto		-					
Directional distribution fac							
Peak-hour factor, PHF	0.9						
Adjusted saturation flow rat			napl				
Percent turns from exclusive		* Pop.	-25-				
		·					
Roa	dway Charact	eristics					
Number of through lanes one	direction, N	2					
Free flow speed, FFS	,	35	mph				
Urban class		3	··· ·				
Section length		0.60	miles				
Median		No					
Left-turn bays		Yes					
-	7 ~ .						
sıg	nal Characte	ristics					
Signalized intersections	2						
Arrival type, AT	3						
Signal type (k = 0.5 for pla	nning) Acti	ıated					
Cycle length, C	90.0) sec					
Effective green ratio, g/C	0.6	00					
	Dogulta						
Results							
Annual average daily traffic	, AADT 350	o vpd					
Two-way hourly volume	3150) vph					
Hourly directional volume	157	5 vph					
Through reliens 15 min floor							
Through-volume 15-min. flow	rate 875	v					
Running time	rate 875 67.2						
•		2 sec					
Running time	67.2	2 sec 3					
Running time v/c ratio	67.2 0.4	2 sec 3 0 vph					
Running time v/c ratio Through capacity Progression factor, PF	67.2 0.4 2050 1.00	sec sec vph					
Running time v/c ratio Through capacity Progression factor, PF Uniform delay	67.3 0.43 2056 1.00 9.7	2 sec 3 0 vph 00 sec					
Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I	67.3 0.43 2056 1.00 9.7 0.90	2 sec 3 vph 00 sec 07					
Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay	67.3 0.43 2056 1.00 9.7 0.90	2 sec 3 vph 00 sec 07 sec	' v				
Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay Control delay	67.3 0.43 2056 1.00 9.7 0.90 0.6	2 sec 3 vph 00 sec 07 sec 3 sec/	'v				
Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay	67.3 0.43 2056 1.00 9.7 0.90	2 sec 3 vph 00 sec 07 sec 3 sec/	v				

Centennial Road Extension

I	PLANNING ANALYSIS					
Analyst: Kondala	Rao Mantri					
Agency/Co.: Stanley	Consultants, Inc					
Date Performed: 5/9/2006						
Analysis Time Period: P.M. Pea						
Jrban Street: Centennial Road Extension						
Direction of Travel:						
	County, AZ					
Analysis Year: 2015						
Project ID: Golden Valley Rand	h Master Traffic Study					
Traffic Characteristics						
Annual average daily traffic, A	ADT 7000 vpd					
Planning analysis hour factor,	-					
Directional distribution factor						
Peak-hour factor, PHF	0.900					
Adjusted saturation flow rate	1800 pcphgpl					
Percent turns from exclusive la	1 1 31					
TOTOGRA CALAD TIOM CACIABLYC TO						
Roadwa	y Characteristics					
Number of through lanes one dir	rection, N 2					
Free flow speed, FFS	, 35 mph					
Urban class	3					
Section length	1.00 miles					
Median	Yes					
Left-turn bays	Yes					
Signal	Characteristics					
	Andreas que es que en constituir de la c					
Signalized intersections	2					
Arrival type, AT	3					
Signal type (k = 0.5 for planni						
Cycle length, C	90.0 sec					
Effective green ratio, g/C	0.600					
	Results					
Annual average daily traffic, A	ADT 7000 vpd					
Two-way hourly volume	630 vph					
Hourly directional volume	315 vph					
Through-volume 15-min. flow rat						
Running time	103.0 sec					
v/c ratio	0.08					
Through capacity	2160 vph					
Progression factor, PF	1.000					
Uniform delay	7.6 sec					
Filtering/metering factor, I	0.999					
Incremental delay	0.1 sec					
Control delay	7.6 sec/v					
Total travel speed, Sa	30.4 mph					
Total urban street LOS	A					

Cerbat Road Extension

PLA	NING ANALYS	rs.				
Analyst: Kondala Rac						
Agency/Co.: Stanley Con	nsultants, Ir	nc				
Date Performed: 5/9/2006						
Analysis Time Period: P.M. Peak F						
rban Street: Cerbat Road Extension						
Direction of Travel:						
Jurisdiction: Mohave Cour	nty, AZ					
Analysis Year: 2015	-1,					
Project ID: Golden Valley Ranch Master Traffic Study						
Traffic Characteristics						
Annual average daily traffic, AAD	5500	vpd				
Planning analysis hour factor, K	0.090	-				
Directional distribution factor, I	0.500					
Peak-hour factor, PHF	0.900					
Adjusted saturation flow rate	1800	pcphgpl				
Percent turns from exclusive lanes		8				
Roadway (Characteristi	ics				
Number of through lanes one direct	ion, N 2					
Free flow speed, FFS	35	mph				
Urban class	3	-				
Section length	1.00) miles				
Median	No					
Left-turn bays	Yes					
signal Cr	naracteristic	CS				
Signalized intersections	2					
Arrival type, AT	3					
Signal type (k = 0.5 for planning)	Actuated					
Cycle length, C	90.0	sec				
Effective green ratio, g/C	0.600					
, ,,						
Results						
Annual average daily traffic, AAD	5500	vpd				
Two-way hourly volume	495	vph				
Hourly directional volume	247	vph				
Through-volume 15-min. flow rate	137	v				
Running time	103.0	sec				
v/c ratio	0.07					
Through capacity	2050	vph				
Progression factor, PF	1.000	VP				
Uniform delay	7.5	sec				
Filtering/metering factor, I	0.999	500				
Incremental delay	0.333	sec				
-	7.6	sec/v				
Control delay						
Total travel speed, Sa	30.5	mph				
Total urban street LOS	A					

East Loop Road

PLANN	IING ANALYSI	rs				
Analyst: Kondala Rao Mantri						
Agency/Co.: Stanley Consultants, Inc						
· · · · · · · · · · · · · · · · · · ·						
Analysis Time Period: P.M. Peak Hour						
Urban Street: East Loop Road						
Direction of Travel:						
Jurisdiction: Mohave Count	y, AZ					
Analysis Year: 2015						
Project ID: Golden Valley Ranch Ma	ster Traffi	ic Study				
3		*				
Traffic	Characteris	stics				
Annual average daily traffic, AADT	20000	rmd				
	30000	vpd				
Planning analysis hour factor, K	0.090					
Directional distribution factor, D	0.500					
Peak-hour factor, PHF	0.900					
Adjusted saturation flow rate	1800	pcphgpl				
Percent turns from exclusive lanes	50	8				
Roadway Ch	aracteristi	ics				
Number of through lanes one directi	on, N 2					
Free flow speed, FFS	35	mph				
		mpn				
Urban class	2					
Section length	3.50) miles				
Median	Yes					
Toft tom born						
Left-turn bays	Yes					
-		ra				
-	racteristic	cs				
Signal Cha		cs				
Signal Cha	racteristic	cs				
Signal Cha Signalized intersections Arrival type, AT	racteristic 2 3	cs				
Signal Cha Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning)	racteristic 2 3 Actuated					
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C	racteristic 2 3 Actuated 90.0	cssec				
Signal Cha Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning)	racteristic 2 3 Actuated					
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C	racteristic 2 3 Actuated 90.0					
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res	racteristic 2 3 Actuated 90.0 0.600	sec				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/CRes Annual average daily traffic, AADT	aracteristic 2 3 Actuated 90.0 0.600 sults 30000	sec				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/CRes Annual average daily traffic, AADT Two-way hourly volume	aracteristic 2 3 Actuated 90.0 0.600 oults 30000 2700	sec				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/CRes Annual average daily traffic, AADT	aracteristic 2 3 Actuated 90.0 0.600 sults 30000	sec				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate	aracteristic 2 3 Actuated 90.0 0.600 oults 30000 2700	sec vpd vph				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750	vpd vph vph vph v				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750 360.0	sec vpd vph vph				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750 360.0 0.35	vpd vph vph vph v				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750 360.0 0.35 2160	vpd vph vph vph v				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750 360.0 0.35 2160 1.000	vpd vph vph vph v				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750 360.0 0.35 2160 1.000 9.1	vpd vph vph vph v				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750 360.0 0.35 2160 1.000 9.1 0.947	vpd vph vph vph v sec vph				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750 360.0 0.35 2160 1.000 9.1 0.947 0.4	vpd vph vph v sec vph sec vph				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750 360.0 0.35 2160 1.000 9.1 0.947	vpd vph vph vph v sec vph				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750 360.0 0.35 2160 1.000 9.1 0.947 0.4	vpd vph vph v sec vph sec vph				
Signal Char Signalized intersections Arrival type, AT Signal type (k = 0.5 for planning) Cycle length, C Effective green ratio, g/C	2 3 Actuated 90.0 0.600 sults 30000 2700 1350 750 360.0 0.35 2160 1.000 9.1 0.947 0.4 9.5	vpd vph vph v sec vph sec vph sec				

East Middle Road

	PLANNI	NG ANALYS	IS				
Analyst: Kondala Rao Mantri							
Agency/Co.: Stanley Consultants, Inc							
Date Performed: 5/9/2006							
Analysis Time Period: P.M. Peak hour							
Urban Street: East Middle Road							
Direction of Travel:							
Jurisdiction: Mohave County, AZ							
Analysis Year: 2015							
Project ID: Golden Valley	Ranch Mas	ster Traff:	ic Stu	dy			
	Traffic C	Characteri	stics_				
Arrayal arramana dailar turaffi	- 77DM	2000	3				
Annual average daily traffi	•	3000	vpd				
Planning analysis hour fact Directional distribution fa		0.090					
Peak-hour factor, PHF	CLOI, D	0.500 0.900					
Adjusted saturation flow ra	t-a	1800	nanh	an l			
Percent turns from exclusiv		50	pcph;	abī			
TOTOCHE CULIES FROM EXCLUSIV	e ranes	50	ъ				
Ro	adway Cha	racterist	ics				
Number of through lanes one	directio	on, N 2					
Free flow speed, FFS	arrecere	30		mph			
Urban class		3		шЪп			
Section length		1.40	1	miles			
Median		No	•				
Left-turn bays		No					
Si	onal Char	acteristic	7 C				
	giiai Ciiai	.uccc115c1(-b				
Signalized intersections		2					
Arrival type, AT		3					
Signal type $(k = 0.5 \text{ for pl})$	anning)	Actuated					
Cycle length, C		90.0	sec				
Effective green ratio, g/C		0.600					
	Resu	ılts					
7							
Annual average daily traffic	C, AADT	3000	vpd				
Two-way hourly volume		270	vph				
Hourly directional volume	1 -	135	vph				
Through-volume 15-min. flow	rate	75	v				
Running time		168.0	sec				
v/c ratio		0.04					
Through capacity		1726	vph				
Progression factor, PF		1.000	900				
Uniform delay	т	7.4	sec				
Filtering/metering factor, :	L	1.000	965				
Incremental delay Control delay		0.0	sec				
Total travel speed, Sa		7.4	sec/	v			
Total urban street LOS		27.6	mph				
TOTAL MIDAN SCIECT DOS		В					

Hualapai Drive Extension

PLANN	ING ANALYS	rs					
Analyst: Kondala Rao Mantri							
Agency/Co.: Stanley Consultants, Inc							
Date Performed: 5/9/2006							
Analysis Time Period: P.M. Peak Hour							
Urban Street: Hualapai Drive Extension							
Direction of Travel:							
Jurisdiction: Mohave County, AZ							
Analysis Year: 2015							
Project ID: Golden Valley Ranch Ma	ster Traffi	ic Study					
Traffic	Characteris	stics					
Annual average daily traffic, AADT	8500	vpd					
Planning analysis hour factor, K	0.090						
Directional distribution factor, D	0.500						
Peak-hour factor, PHF	0.900						
Adjusted saturation flow rate	1800	pcphgpl					
Percent turns from exclusive lanes	50	8					
Roadway Ch	aracteristi	lcs					
Number of through lange one diverti	on N 0						
Number of through lanes one directi- Free flow speed, FFS	•	la					
Urban class	30	mph					
Section length	3 2.20) miles					
Median	No	miles					
Left-turn bays	No No						
Signal Cha	racteristic	CS					
Signalized intersections	2						
Arrival type, AT	3						
Signal type (k = 0.5 for planning)	Actuated						
Cycle length, C	90.0	sec					
Effective green ratio, g/C							
Res	ults						
Annual average daily traffic, AADT	8500	vpd					
Two-way hourly volume	765	vph					
Hourly directional volume	382	vph					
Through-volume 15-min. flow rate	212	v					
Running time	264.0	sec					
v/c ratio	0.12						
Through capacity	1726	vph					
Progression factor, PF	1726 1.000	-					
Progression factor, PF Uniform delay	1726 1.000 7.8	vph sec					
Progression factor, PF Uniform delay Filtering/metering factor, I	1726 1.000 7.8 0.997	sec					
Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay	1726 1.000 7.8 0.997 0.1	sec sec					
Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay Control delay	1726 1.000 7.8 0.997 0.1 7.9	sec sec/v					
Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay	1726 1.000 7.8 0.997 0.1	sec sec					

Indian Wells Road Extension

PLANNING ANALYSIS							
Analyst: Kondala Rao Mantri							
gency/Co.: Stanley Consultants, Inc							
Date Performed: 5/9/2006							
unalysis Time Period: P.M. Peak Hour							
Urban Street: Indian Wells Road Extension							
Direction of Travel:							
Jurisdiction: Mohave County, AZ							
Analysis Year: 2015							
Project ID: Golden Valley Ranch Mas	ster Traffi	ic Study					
		_					
Traffic (Characteris	stics					
Annual average daily traffic, AADT	5500	vpd					
Planning analysis hour factor, K	0.090	. 4.2					
Directional distribution factor, D	0.500						
Peak-hour factor, PHF	0.900						
Adjusted saturation flow rate	1800	pcphgpl					
Percent turns from exclusive lanes	50	8 505351					
The state of the s	50	·					
Roadway Cha	aracteristi	lcs					
Number of through lanes one direction	on, N 2						
Free flow speed, FFS	30	mph					
Urban class	3	mbtt					
Section length	1.30) miles					
Median	No	, miles					
Left-turn bays	No No						
note turn bays	NO						
Signal Char	racteristic	C8					
Signalized intersections	2						
Arrival type, AT	3						
Signal type (k = 0.5 for planning)	Actuated						
Cycle length, C	90.0	sec					
Effective green ratio, g/C	0.600						
3							
Results							
Annual average daily traffic, AADT	5500	vpd					
Two-way hourly volume	495	vph					
Hourly directional volume	247	vph					
Through-volume 15-min. flow rate	137	v					
Running time	156.0	sec					
v/c ratio	0.08	500					
Through capacity	1726	vph					
Progression factor, PF	1.000	vpii					
Uniform delay	7.6	590					
Filtering/metering factor, I	0.999	sec					
Incremental delay		808					
Control delay	0.1	sec					
•	7.6	sec/v					
Total travel speed, Sa Total urban street LOS	27.3	mph					
TOCAL MINGH SCIESC HOS	В						

Mobile Road Extension

PLANN	IING ANALYSI	S					
Analyst: Kondala Rao Mantri							
Agency/Co.: Stanley Consultants. Inc							
Date Performed: 5/9/2006							
Analysis Time Period: P.M. Peak Hour							
Urban Street: Mobile Road Extension							
Direction of Travel:							
Jurisdiction: Mohave County, AZ							
Analysis Year: 2015							
Project ID: Golden Valley Ranch Ma	ster Traffi	.c Study					
Traffic	Characteris	tics					
Ammund account doils two ffic AADM	12000	4					
Annual average daily traffic, AADT	13000	vpd					
Planning analysis hour factor, K Directional distribution factor, D	0.090						
Peak-hour factor, PHF	0.500 0.900						
Adjusted saturation flow rate	1800	nanhani					
Percent turns from exclusive lanes	50	pcphgpl %					
referre turns from exerusive failes	50						
Roadway Ch	aracteristi	.cs					
Number of through lanes one directi	on, N 2						
Free flow speed, FFS	35	mph					
Urban class	3	WE 13					
Section length	0.70	miles					
Median	No						
Left-turn bays	No						
Signal Cha	racteristic	25					
		<u> </u>					
Signalized intersections	2						
Arrival type, AT	3						
Signal type ($k = 0.5$ for planning)	Actuated						
Cycle length, C	90.0	sec					
Effective green ratio, g/C	0.600						
Res	Results						
Annual arrange dails to sell asset	12000	4					
Annual average daily traffic, AADT	13000	vpd					
Two-way hourly volume	1170	vph					
Hourly directional volume Through-volume 15-min. flow rate	585	vph					
Running time	325 75.3	V					
v/c ratio	0.19	sec					
Through capacity	1726	vph					
Progression factor, PF	1.000	A D.T.					
Uniform delay	8.1	sec					
Filtering/metering factor, I	0.990						
Incremental delay	0.2	sec					
Control delay	8.4	sec/v					
Total travel speed, Sa	27.4	mph					
Total urban street LOS	В						

Ramada Road Extension

PLA	NNING ANALYSI	IS					
Analyst: Kondala Rao Mantri							
Agency/Co.: Stanley Consultants. Inc							
Date Performed: 5/9/2006							
Analysis Time Period: P.M. Peak Hour							
Urban Street: Ramada Road Extension							
Direction of Travel:							
Jurisdiction: Mohave County, AZ							
Analysis Year: 2015							
Project ID: Golden Valley Ranch	Master Traffi	ic Study					
m 661							
Traffi	c Characteris	stics	_				
Annual average daily traffic, AAD	т 13000	vpd					
Planning analysis hour factor, K	0.090	-					
Directional distribution factor,	D 0.500						
Peak-hour factor, PHF	0.900						
Adjusted saturation flow rate	1800	pcphgpl					
Percent turns from exclusive lane	s 50	%					
Roadway	Characteristi	ics					
Number of through lanes one direc	tion, N 2						
Free flow speed, FFS	35	mph					
Urban class	3	···E					
Section length	2.40	0 miles					
Median	No						
Left-turn bays	No						
•							
Signal C	haracteristic	cs					
Signalized intersections	2						
Arrival type, AT	3						
Signal type $(k = 0.5 \text{ for planning})$) Actuated						
Cycle length, C	90.0	sec					
Effective green ratio, g/C	0.600						
. J							
R	esults						
			_				
Annual average daily traffic. AAD	T 13000	pay					
Annual average daily traffic, AAD		vpd voh					
Two-way hourly volume	1170	vph					
Two-way hourly volume Hourly directional volume	1170 585	vph vph					
Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate	1170 585 325	vph vph v					
Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time	1170 585 325 246.9	vph vph					
Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio	1170 585 325 246.9 0.19	vph vph v sec					
Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity	1170 585 325 246.9 0.19 1726	vph vph v					
Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF	1170 585 325 246.9 0.19 1726 1.000	vph vph v sec vph					
Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay	1170 585 325 246.9 0.19 1726 1.000 8.1	vph vph v sec					
Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I	1170 585 325 246.9 0.19 1726 1.000 8.1 0.990	vph vph v sec vph sec					
Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay	1170 585 325 246.9 0.19 1726 1.000 8.1 0.990	vph vph v sec vph sec					
Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay Control delay	1170 585 325 246.9 0.19 1726 1.000 8.1 0.990 0.2 8.4	vph vph v sec vph sec sec sec/v					
Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay	1170 585 325 246.9 0.19 1726 1.000 8.1 0.990	vph vph v sec vph sec					

Sacramento Road Extension

PLANNING ANALYSIS							
Analyst: Kondala Rao Mantri							
Agency/Co.: Stanley Consultants, Inc							
Date Performed: 5/9/2006							
Analysis Time Period: P.M. Peak Hour							
Urban Street: Sacramento Road Extension							
Direction of Travel:							
Jurisdiction: Mohave County, AZ							
Analysis Year: 2015							
Project ID: Golden Valley Ranch Ma	ster Traffi	ic Study					
Traffic	Characteris	stics					
		_					
Annual average daily traffic, AADT	30000	vpd					
Planning analysis hour factor, K	0.090						
Directional distribution factor, D	0.500						
Peak-hour factor, PHF	0.900						
Adjusted saturation flow rate	1800	pcphgpl					
Percent turns from exclusive lanes	50	%					
Roadway Ch	aracteristi	ics					
Number of through lanes one directi	on, N 3	,					
Free flow speed, FFS	OII, N 3	mnh					
Urban class	2	mph					
Section length	1.10) miles					
Median	Yes) miles					
Left-turn bays	Yes						
here-curn bays	105						
Signal Cha	racteristic	cs					
Signalized intersections	2						
Arrival type, AT	3						
Signal type (k = 0.5 for planning)	Actuated						
Cycle length, C	90.0						
		sec					
Effective green ratio, g/C	0.600	sec					
Effective green ratio, g/C	0.600	sec					
	0.600 ults	sec					
Res	ults						
		vpd					
Res	ults	vpd vph					
Res Annual average daily traffic, AADT Two-way hourly volume	ults 30000 2700	vpd					
Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume	ults 30000 2700 1350	vpd vph vph					
Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time	30000 2700 1350 750	vpd vph vph v					
Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate	30000 2700 1350 750 95.9 0.23	vpd vph vph v					
Res Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio	30000 2700 1350 750 95.9	vpd vph vph v sec					
Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity	30000 2700 1350 750 95.9 0.23 3240	vpd vph vph v sec					
Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF	30000 2700 1350 750 95.9 0.23 3240 1.000	vpd vph vph v sec vph					
Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay	30000 2700 1350 750 95.9 0.23 3240 1.000 8.4	vpd vph vph v sec vph					
Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I	30000 2700 1350 750 95.9 0.23 3240 1.000 8.4 0.982	vpd vph vph v sec vph					
Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay	30000 2700 1350 750 95.9 0.23 3240 1.000 8.4 0.982 0.2	vpd vph vph v sec vph sec					
Annual average daily traffic, AADT Two-way hourly volume Hourly directional volume Through-volume 15-min. flow rate Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor, I Incremental delay Control delay	30000 2700 1350 750 95.9 0.23 3240 1.000 8.4 0.982 0.2 8.5	vpd vph vph v sec vph sec sec sec/v					

TC Connector

PLANNING ANALYSIS							
Analyst: Kondala Rao Mantri							
gency/Co.: Stanley Consultants, Inc							
Date Performed: 5/9/2006							
Analysis Time Period:	=						
Urban Street: TC Connecter							
Direction of Travel:							
Jurisdiction:	Mohave County, AZ						
Analysis Year: 2015							
Project ID: Golden Val	lley Ranch Mas	ster Traffi	.c Study				
	Traffic (Characteris	stics				
Annual average daily to	raffic. AADT	24500	vpd				
Planning analysis hour		0.090					
Directional distribution		0.500					
Peak-hour factor, PHF	•	0.900					
Adjusted saturation flo	ow rate	1800	pcphgpl				
Percent turns from exc	lusive lanes	50	8				
	Roadway Cha	aracteristi	.cs				
			· · · · · · · · · · · · · · · · · · ·				
Number of through lanes	s one directio	on, N 2					
Free flow speed, FFS		30	mph				
Urban class		3					
Section length		1.30) miles				
Median	No						
Left-turn bays		No					
Left-turn bays	Signal Char		CS				
		racteristic	cs				
Signalized intersection		racteristic	cs				
Signalized intersection	ns	racteristic 2 3	cs				
Signalized intersection Arrival type, AT Signal type (k = 0.5 fc	ns	racteristic 2 3 Actuated					
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C	or planning)	cacteristic 2 3 Actuated 90.0	cs				
Signalized intersection Arrival type, AT Signal type (k = 0.5 fc	or planning)	racteristic 2 3 Actuated					
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C	or planning)	2 3 Actuated 90.0 0.600					
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C	ns or planning) g/C Resu	2 3 Actuated 90.0 0.600					
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio,	ns or planning) g/C Resu	cacteristic 2 3 Actuated 90.0 0.600	sec				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to	ns or planning) g/CResu	cacteristic 2 3 Actuated 90.0 0.600	sec				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume	or planning) g/C Resuctaffic, AADT	cacteristic 2 3 Actuated 90.0 0.600 alts 24500 2205	sec vpd vph				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume Hourly directional volume Through-volume 15-min.	or planning) g/C Resuctaffic, AADT	2 3 Actuated 90.0 0.600 alts 24500 2205 1102	sec vpd vph vph				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume Hourly directional volume	or planning) g/C Resuctaffic, AADT	2 3 Actuated 90.0 0.600 alts 24500 2205 1102 612	sec vpd vph vph vph v				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume Hourly directional volume Through-volume 15-min. Running time	or planning) g/C Resuctaffic, AADT	2 3 Actuated 90.0 0.600 1lts 24500 2205 1102 612 156.0	sec vpd vph vph vph v				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume Hourly directional volume Through-volume 15-min. Running time v/c ratio	or planning) g/C Resuctaffic, AADT	2 3 Actuated 90.0 0.600 1lts 24500 2205 1102 612 156.0 0.35	vpd vph vph vph v				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume Hourly directional volume Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF Uniform delay	or planning) g/CResurraffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 1lts 24500 2205 1102 612 156.0 0.35 1726	vpd vph vph vph v				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume Hourly directional volume Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor	or planning) g/CResurraffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 alts 24500 2205 1102 612 156.0 0.35 1726 1.000	vpd vph vph v sec vph				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume Hourly directional volume Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF Uniform delay	or planning) g/CResurraffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 alts 24500 2205 1102 612 156.0 0.35 1726 1.000 9.1	vpd vph vph v sec vph				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume Hourly directional volume Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor Incremental delay Control delay	or planning) g/CResurraffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 alts 24500 2205 1102 612 156.0 0.35 1726 1.000 9.1 0.943	vpd vph vph v sec vph				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume Hourly directional volume Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering fact Incremental delay Control delay Total travel speed, Sa	or planning) g/CResurraffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 alts 24500 2205 1102 612 156.0 0.35 1726 1.000 9.1 0.943 0.5	vpd vph vph vph v sec vph sec				
Signalized intersection Arrival type, AT Signal type (k = 0.5 for Cycle length, C Effective green ratio, Annual average daily to Two-way hourly volume Hourly directional volume Through-volume 15-min. Running time v/c ratio Through capacity Progression factor, PF Uniform delay Filtering/metering factor Incremental delay Control delay	or planning) g/CResurraffic, AADT ume flow rate	2 3 Actuated 90.0 0.600 alts 24500 2205 1102 612 156.0 0.35 1726 1.000 9.1 0.943 0.5 9.7	vpd vph vph v sec vph sec sec sec/v				

West Loop Road

PLANNING ANALYSIS							
Analyst: Kondala Rao Mantri							
Agency/Co.: Stanley Consult							
Date Performed: 5/9/2006							
Analysis Time Period: P.M. Peak Hour							
Urban Street: West Loop Road							
Direction of Travel:							
Jurisdiction: Mohave County, AZ							
Analysis Year: 2015			-				
Project ID: Golden Valley Ran	cn Master	Traffic St	udy				
Tra	ffic Chara	cteristics					
Annual average daily traffic,	AADT 190	00 vpd					
Planning analysis hour factor,		_					
Directional distribution facto							
Peak-hour factor, PHF	0.9						
Adjusted saturation flow rate	180	0 pcp!	hgpl				
Percent turns from exclusive 1	anes 50	8					
Roadw	ay Charact	eristics					
Number of through lanes one di	rection, N						
Free flow speed, FFS		35	mph				
Urban class		2					
Section length Median		3.20	miles				
		Yes					
Left-turn bays		Yes					
Signa	l Characte	ristics					
Signalized intersections	2						
Arrival type, AT	3						
Signal type (k = 0.5 for plann	ing) Act	uated					
Cycle length, C	90.	0 sec					
Effective green ratio, g/C							
	Results						
Annual average daily traffic,	AADT 190	00 vpd					
Two-way hourly volume	171	-					
Hourly directional volume	855	~					
Through-volume 15-min. flow ra		_					
Running time	329						
v/c ratio	0.2						
Through capacity	216	-					
Progression factor, PF	1.0						
Uniform delay Filtering/metering factor, I	8.3	Sec					
	0.9						
Incremental delay Control delay	0.2		/				
-	8.5		, v				
Total travel speed, Sa Total urban street LOS	33. B	3 mph					
10001 UIDAM BUICEU 100	D						

2025 Results